

MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD

CALEPA HEADQUARTERS
BYRON SHER AUDITORIUM
SECOND FLOOR
1001 I STREET
SACRAMENTO, CALIFORNIA

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JAMES F. PETERS, CSR
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Mr. John Eisenhut

Senator Dean Florez

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Ms. Diane Takvorian

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Ms. Edie Chang, Deputy Executive Officer

Mr. Kurt Karperos, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. La Ronda Bowen, Ombudsman

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STAFF:

Dr. Alvaro Alvarado, Air Resources Supervisor I, Research Division(RD)

Mr. Jeff Austin, Staff, Health & Exposure Assessment Branch, RD

Mr. Greg Binder, Chief, Vehicle, Parts & Consumer Products Branch, ED

Ms. Michelle Buffington, Manager, Off-Road Agricultural Strategies and Incentives Section, MSCD

Mr. Peter Christensen, Manager, Innovative Heavy-Duty Strategies Section, MSCD

Mr. Bart Croes, Division Chief, RD

Ms. Shannon Downey, Air Resources Engineer, Specialized Fleet Enforcement Section, Enforcement Division(ED)

Mr. Michael Gibbs, Assistant Executive Officer

Mr. Sam Gregor, Manager, Advanced Transportation Incentive Strategies Section, MSCD

Ms. Trish Johnson, Climate Change Policy Section, ISD

Ms. Stephanie Kato, Staff Air Pollution Specialist, Energy Section, Industrial Strategies Division(ISD)

Ms. Deborah Kerns, Senior Attorney, Legal Office

Ms. Margret Kim, Senior Attorney, Legal Office

Mr. Jack Kitowski, Division Chief, Mobile Source Control Division(MSCD)

Ms. Natalie Lee, Air Pollution Specialist, Climate Change Planning Section, ISD

Mr. Jeff Lindberg, Manager, District Support Section, ED

Mr. Aron Livingston, Assistant Chief Counsel, Legal Office

A P P E A R A N C E S C O N T I N U E D

STAFF:

Ms. Lisa Macumber, Manager, Innovative Light-Duty Strategies Section, MSCD

Ms. Karen Magliano, Division Chief, Air Quality Planning and Science Division

Mr. Gabriel, Monroe, Attorney, Legal Office

Ms. Lucina Negrete, Chief, Innovative Strategies Branch, MSCD

Mr. Andrew Panson, Air Pollution Specialist, Innovative Strategies Branch, Mobile Source Control Division

Ms. Rajinder Sahota, Assistant Division Chief, ISD

Mr. Todd Sax, Division Chief, ED

Dr. Linda Smith, Branch Chief, Health and Exposure Branch, RD

Mr. Mark Stover, Chief, Field Operations Branch, ED

Mr. Floyd Vergara, Division Chief, ISD

Mr. Jakub Zielkiewicz, Air Pollution Specialist, Market Monitoring Section, ISD

ALSO PRESENT:

Mr. Alan Abbs, California Air Pollution Control Officers Association

Mr. Nathan Bengtsson, Pacific Gas & Electric

Ms. Kelly Burns, representing Senator McGuire

Mr. Tim Carmichael, SoCalGas

Mr. Nicholas Chavez, California Association of School Transportation Officials, School Transportation Coalition

Mr. Monty Cox, City of Visalia

A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

Mr. Steven Douglas, Alliance of Automobile Manufacturers, Inc.

Mr. Evan Edgar, Compost Coalition, Clean Fleets Coalition

Mr. Anthony Fournier, Bay Area Air Quality Management District

Mr. Randal Friedman

Mr. Jeff Grant, Ballard Power Systems

Ms. Bonnie Holmes-Gen, American Lung Association in California

Mr. Jason Ikerd, San Francisco International Airport

Mr. Shrayas Jatkar, Coalition for Clean Air

Mr. John Larrea, California League of Food Processors

Mr. Kent Leacock, Proterra

Ms. Yoshimi Lee, Mitsubishi Motors

Ms. Julia Levin, Bioenergy of California

Dr. Edward Lovelace, XL Hybrids

Mr. Bill Magavern, Coalition for Clean Air

Mr. Mike Maher, Cummins Pacific

Ms. Lisa McGhee, San Diego Airport Parking

Mr. Fred Minassian, South Coast Air Quality Management District

Mr. Nitin Natesan, Linde, LLC

Mr. Brad Neff, Pacific Gas & Electric

Mr. David Norris, Lakeport Unified School District

Mr. Graham Noyes, Low Carbon Fuels Corporation

A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

Ms. Rachael O'Brien, Agricultural Council

H.E. Christian "Chris" Peoples, AC Transit

Mr. Michael Pimentel, California Transit and Boeing

Mr. Mike Rea, California Association of School
Transportation Officials, School Transportation Coalition

Ms. Kathryn Rees, Southwest Airlines

Ms. Hannah Rozowski-Vogt, Environmental Defense Fund

Ms. Lauren Skiver, Sunline Transit Agency

Mr. Adam Smith, Southern California Edison

Ms. Shelly Sullivan, Climate Change Policy Coalition

Mr. Tim Taylor, Airlines for America

Ms. Moira Topp, Orange County Transportation Authority

Mr. Richard Tree, City of Porterville

Ms. Eileen Tutt, California Electric Transportation
Coalition

Ms. Kathy Van Osten, MVM Strategy Group, United Airlines

Ms. Diane Vazquez, Sierra Club California

Mr. Steve Wallauch, Center for Transportation and
Environment

Ms. Jeanie Ward-Waller, California Bicycle Coalition

Mr. David Warren, New Flyer of American, Inc.

Mr. Desmond Wheatley, Envision Solar International

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1 P R O C E E D I N G S

2 CHAIR NICHOLS: Okay. We will now come to order,
3 and begin our formal proceedings with the Pledge of
4 Allegiance.

5 Please rise.

6 (Thereupon the Pledge of Allegiance was
7 recited in unison.)

8 CHAIR NICHOLS: Thank you.

9 Let me just also mention before we start with the
10 agenda that we will be enforcing the three minute time
11 limit today, that we have cards also for anyone who wants
12 to testify that they can get from the clerk or outside the
13 room.

14 And I think with that, we are ready to move into
15 the agenda -- oh, I'm supposed to also remind you that
16 there are exits at the rear of the room and on either side
17 here. In the event of an alarm going off, we're required
18 to vacate the room and the building and to assemble
19 outside until we get an all-clear signal.

20 Okay. So I think we begin with the first item,
21 that's good, which is the proposed fiscal year 2016-17
22 funding plan for low carbon transportation and fuels
23 investments from the cap-and-trade auction proceeds, and
24 the Air Quality Improvement Program, otherwise known as
25 AQIP. This funding serves as the Air Resources Board's

1 blueprint -- the funding plan, I should say, is the
2 blueprint for spending the \$500 million that the Governor
3 has proposed for low carbon transportation and fuels
4 investments and \$28 million for the AQIP incentive
5 projects.

6 This funding represents a significant investment
7 in zero and near zero emissions technologies, and also
8 supports a substantial investment in low -- in
9 disadvantaged communities with at least half of the low
10 carbon transportation funds allocated to benefit those
11 disadvantaged communities and at least 10 percent invested
12 directly in these communities.

13 Last year, we received less than our expected
14 budget appropriation, so the program has been operating in
15 a maintenance mode. The proposed plan would allow us to
16 regain momentum for these important technology advancing
17 investments. And while the legislature has not yet acted
18 on the auction proceeds budget, the funding plan shows
19 that there's a strong need and demand for this funding.
20 So we're approving it in advance of having the money
21 actually available to handout. But when the money does
22 become available, we will know where it's going and we'll
23 be able to move it quickly.

24 So Mr. Corey, would you please introduce this
25 item.

1 EXECUTIVE OFFICE COREY: Yes. Thank --

2 BOARD CLERK JENSEN: Chair Nichols, we actually
3 need to still call the roll.

4 CHAIR NICHOLS: Oh, I apologize. I saw there was
5 a quorum, why do we need to take the roll?

6 (Laughter.)

7 BOARD CLERK JENSEN: Details.

8 CHAIR NICHOLS: Isn't that enough?

9 (Laughter.)

10 CHAIR NICHOLS: All right. Please, call the
11 roll, Madam Clerk.

12 BOARD CLERK JENSEN: Thank you.

13 Dr. Balmes?

14 BOARD MEMBER BALMES: Here.

15 BOARD CLERK JENSEN: Mr. De La Torre?

16 Mr. Eisenhut?

17 BOARD MEMBER EISENHUT: Here.

18 BOARD CLERK JENSEN: Senator Florez?

19 BOARD MEMBER FLOREZ: Here.

20 BOARD CLERK JENSEN: Supervise Gioia?

21 Ms. Mitchell?

22 BOARD MEMBER MITCHELL: Here.

23 BOARD CLERK JENSEN: Mrs. Riordan?

24 BOARD MEMBER RIORDAN: Here.

25 BOARD CLERK JENSEN: Supervisor Roberts?

1 BOARD MEMBER ROBERTS: Here.

2 BOARD CLERK JENSEN: Supervisor Serna?

3 BOARD MEMBER SERNA: Here.

4 BOARD CLERK JENSEN: Dr. Sherriffs?

5 Professor Sperling?

6 Ms. Takvorian?

7 BOARD MEMBER TAKVORIAN: Here.

8 BOARD CLERK JENSEN: Vice Chair Berg?

9 Chair Nichols?

10 CHAIR NICHOLS: Here.

11 BOARD CLERK JENSEN: Madam Chair, we have a
12 quorum.

13 CHAIR NICHOLS: Well, see?

14 (Laughter.)

15 CHAIR NICHOLS: Thank you. I appreciate it.

16 All right. We're going to do this properly.

17 All right. Mr. Corey, would you please introduce
18 this item?

19 EXECUTIVE OFFICER COREY: Thank you, Chair.

20 So incentive programs are a critical part of our
21 strategy to accelerate the development, deployment, and
22 widespread use of cleaner motor vehicle and equipment
23 technologies. And as we've heard over the past year
24 during the updates on the mobile source strategy, the
25 sustainable freight strategy, and the scoping plan,

1 meeting our climate, air quality, and petroleum reduction
2 goals will require transformation -- a transformation of
3 the California vehicle fleet to one with widespread use of
4 zero and near zero emission vehicles operating on the
5 cleanest fuels and energy sources, both for the passenger
6 and freight transportation sectors.

7 The investments in this plan represent an
8 important component of this transformation. Last year, we
9 were unable to implement many of the projects that the
10 Board approved in the funding plan because of the limited
11 budget appropriation. Carrying forward, these unfunded
12 projects is a top priority this year, as is expanding our
13 investments in equity projects benefiting lower income
14 Californians and disadvantaged communities.

15 The staff proposal also meets anticipated demand
16 for ongoing clean vehicle projects. A new element in this
17 year's proposal is funding to incentivize the production
18 of very low carbon fuels to complement our vehicle and
19 equipment investments.

20 And also new this year is a long-term plan for
21 the Clean Vehicle Rebate Project and related light-duty
22 incentives. This addresses the requirements of Senate
23 Bill 1275, and responds to the Board's direction to lay
24 out a multi-year vision for these investments and to
25 identify when the zero emission vehicle is expected to be

1 continue and expand benefits for California's
2 disadvantaged communities, a key tenet for the State's
3 cap-and-trade auction proceeds.

4 As Mr. Corey noted, we're also presenting a
5 long-term plan for CVRP and the light-duty vehicle
6 incentives. This will help ensure a sustainable program
7 moving forward and chart a course for ramping down
8 incentives as the ZEV market grows.

9 --o0o--

10 AIR POLLUTION SPECIALIST PANSON: California
11 faces ambitious goals to reduce greenhouse gas emissions,
12 improve air quality, cut toxics exposure, and reduce
13 petroleum dependency. Today's proposal reflects a
14 coordinated strategy to make progress towards all these
15 goals.

16 --o0o--

17 AIR POLLUTION SPECIALIST PANSON: Our multiple
18 long-term plans conclude that many of the same actions are
19 needed to meet greenhouse gas, smog forming, and toxic
20 pollutant emission reduction goals, specifically a
21 transition to zero emission and near zero emission
22 technologies across all vehicle and equipment categories.

23 To support this transition, the administration's
24 first two cap-and-trade auction proceeds investment plans
25 identify zero emission passenger transportation and low

1 carbon freight transport as investment priorities.
2 Starting with this policy direction, we relied on
3 assessments of emission contributions, technology
4 readiness, market demand, past investments, and external
5 input to develop the investment proposal before you today.

6 --o0o--

7 AIR POLLUTION SPECIALIST PANSON: I'll first
8 provide some background before delving into the details of
9 our proposal. As I noted in the opening, the plan builds
10 on investments back to 2009. AQIP provides foundation for
11 the low carbon transportation investments that now make up
12 the vast majority of our funding. AQIP focuses on
13 reducing criteria pollutant and diesel particulate
14 emissions, often with concurrent greenhouse gas
15 reductions. Cap-and-trade auction proceeds greatly expand
16 the scale of our advanced technology incentives, also
17 adding the requirement to reduce greenhouse gas emissions
18 and provide disadvantaged community benefits.

19 Two key bills signed in 2014, Senate Bills 1275
20 and 1204 provide direction on how we implement these
21 incentives. Fundamental to these programs is an annual
22 funding plan, which details the priorities and projects
23 for each fiscal year. By developing a joint plan for both
24 AQIP and auction proceeds, we ensure synergistic
25 investments between the two. To date, we've invested

1 about \$600 million and will highlight some of the results
2 over the next few slides.

3 --o0o--

4 AIR POLLUTION SPECIALIST PANSON: These
5 investments are making a real difference in the California
6 fleet. We've provided rebates for 150,000 zero emission
7 and plug-in hybrid passenger cars, vouchers for over 2,500
8 hybrid and zero emission trucks and loans for 10,000
9 cleaner trucks. As recently as a few years ago, a ZEV
10 driving down the street was a rare site, and now it's
11 becoming a much more common occurrence.

12 You've heard a lot about CVRP, the hybrid truck
13 vouchers, and the truck loan program over the years, so
14 today we'd like to focus on some of the newer projects
15 we've recently funded.

16 --o0o--

17 AIR POLLUTION SPECIALIST PANSON: Since the
18 2014-15 plan, we funded a suite of equity projects
19 designed to increase access to clean transportation for
20 lower income households and disadvantaged communities. We
21 helped launch district run scrap-and-replace programs for
22 lower income vehicle owners in the San Joaquin Valley and
23 South Coast. Both programs have seen strong early demand
24 helping over 600 people get into cleaner cars to date.
25 Expanding these programs to other air districts is a

1 Port of Los Angeles terminal, two rail yards in the Cities
2 of San Bernardino and Commerce, and a freight transfer
3 yard in Fontana. All of these facilities are located in
4 disadvantaged communities.

5 We held a \$25 million competitive solicitation
6 for zero-emission truck and bus pilot deployments and the
7 response was overwhelming. We received 38 applications
8 requesting nearly \$300 million showing strong demand for
9 these types of projects.

10 We could only fund the three highest scoring
11 projects, two in the San Joaquin Valley and one in the
12 South Coast. These will put electric and fuel-cell buses
13 in service in disadvantaged communities.

14 We're proposing an additional 60 million in this
15 year's plan to fund the next highest scoring projects from
16 this solicitation. All of the heavy-duty projects include
17 an independent data collection and analysis component that
18 will verify emission reductions, vehicle performance, and
19 commercial viability. We'll use the data to evaluate
20 these projects' success and design future investments to
21 help these technologies progress towards larger scale
22 commercialization.

23 --o0o--

24 AIR POLLUTION SPECIALIST PANSON: With that,
25 let's move on to this year's proposal.

1 The Governor has proposed \$500 million for low
2 carbon transportation and fuels investments funded with
3 auction proceeds. The proposal would continue the
4 commitment to invest at least half the funds to benefit
5 disadvantaged communities, and at least 10 percent of the
6 funds to be invested directly in these disadvantaged
7 communities.

8 This year's proposal includes \$40 million for
9 very low carbon fuel production, a new addition to ARB's
10 incentive portfolio. As Chair Nichols mentioned in the
11 introduction, the legislature has deferred action on the
12 Governor's cap-and-trade expenditure proposal, so this
13 part of the plan is contingent on funding approval.

14 The State budget approved by the legislature does
15 include the nearly \$29 million for AQIP.

16 --o0o--

17 AIR POLLUTION SPECIALIST PANSON: This next slide
18 highlights our key priorities for this year's funding
19 plan. As with past cycles, we're proposing funding
20 allocations to match our best estimates of demand for our
21 consumer driven first-come first-served projects. These
22 include CVRP, the scrap and place incentives, HVIP, and
23 now low NOx engine incentives.

24 We're prioritizing carrying forward the unfunded
25 project categories from our last funding plan refining

1 them based on what we've learned over the past year and
2 increasing some allocations to meet projected demand. As
3 part of this, we'll significantly increase funding for our
4 light-duty equity projects. In many ways, we're bringing
5 back the plan that the Board endorsed last year, but that
6 we were unable to implement because of the limited budget
7 appropriation.

8 In addition to these proposed investments,
9 developing the long-term plan for light-duty vehicle
10 incentives was another priority. We developed today's
11 proposal through an extensive public process that included
12 three workshops, and 15 more focused work group meetings.
13 We appreciate the willingness of our stakeholders to
14 devote so much time to work with us to help shape our
15 proposal.

16 --o0o--

17 AIR POLLUTION SPECIALIST PANSON: Before
18 summarizing our funding allocations, I'll briefly
19 highlight the long-term plan for CVRP and related
20 incentives, because it helped inform our light-duty
21 proposal. As I noted in the introduction, the plan is
22 required by Senate Bill 1275. It also responds to
23 requests from the Board from a multi-year vision for these
24 incentives and a path to ensure that incentives are phased
25 out appropriately as the market matures.

1 Per SB 1275, the plan must include a three-year
2 forecast of funding needs, a market and technology
3 assessment, and an assessment of when a self-sustaining
4 market is expected.

5 --o0o--

6 AIR POLLUTION SPECIALIST PANSON: We estimate a
7 potential funding need for CVRP and the associated equity
8 projects growing to as much as 300 to 400 million by the
9 third year of our forecast assuming no changes to the
10 current CVRP structure. However, we acknowledge a high
11 degree of uncertainty with projections beyond one year.

12 Our market and technology assessment show
13 positive signs regarding the state of the ZEV market with
14 growth in vehicle diversity, number of manufacturers
15 selling vehicles, and consumer demand. CVRP-eligible
16 vehicles now account now for about three percent of annual
17 passenger car sales in California.

18 We also found vehicle technology costs declining
19 quicker than originally expected in most cases. A much
20 more comprehensive technology assessment is being jointly
21 conducted by ARB, U.S. EPA, and the National Highway
22 Traffic Safety Administration in support of California and
23 federal motor vehicle regulations. It's slated for
24 release at the end of the month.

25 We'll share the findings from this joint agency

1 technical assessment report with the Board later this year
2 as part of our update on the mid-term review of the ZEV
3 and Advanced Clean Cars regulations.

4 --o0o--

5 AIR POLLUTION SPECIALIST PANSON: As part of the
6 long-term plan, we evaluated potential sustainability
7 indicators, and proposed using ZEV market penetration as a
8 measure of sustainability based on a well-established
9 theory of technology adoption. We believe that once
10 annual sales reach about 16 percent of the passenger car
11 market, the market has penetrated the most difficult group
12 of adopters for ensuring its success, and has reached
13 sustainability.

14 Given that the market is at about three percent
15 today, we believe it will take at least another five to
16 ten years before this level of adoption is achieved. This
17 provides a starting point for assessing when the ZEV
18 market will be sustainable and we'll re-assess and adjust
19 in future plans as the market grows and new data become
20 available.

21 We include metrics that can be used to measure
22 progress towards this target and identify mechanisms that
23 could be used to ramp down incentives as the market
24 matures. We also note possible alternative incentive
25 structures that could be considered in future years.

1 We'll use this to start phasing down CVRP in
2 future funding plans. However, we believe it's premature
3 to begin a ramp down this year, because the market is
4 still in its infancy.

5 --o0o--

6 AIR POLLUTION SPECIALIST PANSON: I'll now move
7 on to our project allocations first focusing on the
8 pending \$500 million for low carbon transportation and
9 fuels. You can see the proposed allocations for
10 light-duty vehicles, heavy-duty vehicles and fuels on this
11 slide. The allocations come along with project criteria
12 that would ensure that we exceed the minimum disadvantaged
13 community investment targets I mentioned earlier.

14 Throughout the funding plan development process,
15 stakeholders pointed out the need for incentive funding
16 beyond that proposed here. And that's reflected in many
17 of the comment letters we received. A case could easily
18 be made for additional funding for each of these
19 categories. Our proposal attempts to balance the
20 available funding with the funding needs across all
21 categories.

22 --o0o--

23 AIR POLLUTION SPECIALIST PANSON: First, a closer
24 look at our light-duty vehicle proposal. We used the
25 funding need forecast developed as part of the long-term

1 plan to come up with the project allocations shown on this
2 slide. We believe these would meet expected demand
3 through next summer.

4 CVRP ran out of funding earlier this month is
5 currently accepting applications on a waiting list. To
6 address this, we've split the CVRP allocation into two
7 parts. We direct 55 million into the existing grant to
8 fund the waiting list and all new applications that come
9 in, while we hold a solicitation to select an
10 administrator for the upcoming cycle. This could take
11 three months or even longer, given that it looks like we
12 won't have a program budget in place on July 1st. So the
13 two-part allocation would allow us to expedite rebate
14 payment as soon as funds become available.

15 --o0o--

16 AIR POLLUTION SPECIALIST PANSON: Given that we
17 just implemented the CVRP income cap and higher rebates
18 for lower income consumers at the end of March, we're not
19 proposing any changes to per vehicle rebate levels this
20 year. We are proposing several important refinements
21 though. As you've heard in past years, there's
22 considerable interest in incorporating a prequalification
23 or point-of-sale mechanism into CVRP. We're proposing to
24 include pre-qualification this year. We still need to
25 work through the precise implementation details, so we

1 envision it would take up to six months after we have a
2 new grantee in place to launch this new change.

3 We also propose increased outreach in public
4 education with a disadvantaged community focus to raise
5 consumer awareness.

6 And finally, we're incorporating provisions that
7 would prioritize payment of lower income consumer rebates,
8 if funding runs short. Although, we believe the proposed
9 allocation would cover the full funding cycle.

10 --o0o--

11 AIR POLLUTION SPECIALIST PANSON: For the equity
12 projects, we propose increasing funding from 10 million
13 last year to \$50 million this year. This includes
14 expanding the four projects funded in previous years, car
15 scrap and replace, car sharing and mobility options,
16 financing assistance, and increased public fleet
17 incentives.

18 We would add a new project to support cleaner
19 agricultural worker vanpool fleets in the San Joaquin
20 Valley, which we had hoped to add last year, but couldn't
21 with the limited budget. These projects provide lower
22 income consumers access to clean transportation that they
23 might not be able to otherwise afford.

24 These investments also support the growth of a
25 used ZEV market by providing funding to support used ZEV

1 purchases. Highlighting a few of the proposed changes, we
2 would expand our financing assistance for lower income
3 consumers statewide, rather than limiting it to benefiting
4 disadvantaged communities. This would allow it to reach
5 additional consumers.

6 We would also expand scrap and replace to
7 additional air districts. This is another element that we
8 had to defer from last year.

9 I should mention that in addition to these
10 expanded investments we're also undertaking a study on
11 overcoming the barriers to zero emission and near zero
12 emission transportation for low income Californians.
13 We'll be updating the Board next month on that study, and
14 it will help us design these projects and our broader
15 investment strategy moving forward.

16 --o0o--

17 AIR POLLUTION SPECIALIST PANSON: Now, on to our
18 heavy-duty proposal.

19 Advanced technologies in the heavy-duty sector
20 are not as mature as in the light-duty section. Continued
21 investment in zero emission and near zero emission
22 demonstrations and early commercial deployments is
23 necessary to foster heavy-duty technology development and
24 transfer the light-duty vehicle progress to this more
25 challenging sector.

1 implemented as a new part of HVIP.

2 We've designed a per engine incentive that's
3 appropriate for the incremental cost of this engine, and
4 an overall allocation we believe would meet anticipated
5 demand. As other engines come to market, we'll propose
6 appropriate incentive amounts and eligibility
7 requirements for each new engine.

8 We're also continuing to work with stakeholders
9 to ensure that we implement the renewable fuel use
10 requirement in a manner that works for fleets and fuel
11 providers. We also propose \$60 million to fund the next
12 highest scoring project from the greatly oversubscribed
13 zero emission truck and bus pilot solicitation.

14 I noted earlier that we expect to exceed the
15 disadvantaged community investment targets established in
16 the plan. And these two pilots are part of the reason
17 we're confident of that. In the funding plan, we had
18 anticipated that at least 75 percent of these zero
19 emission truck and bus pilot funds would benefit
20 disadvantaged communities.

21 Now, that we've scored all the applications,
22 we're pleased to report that 95 percent of these funds
23 would go to buses and trucks operating in these
24 communities. This would put us well ahead of both our
25 goals for investments in and benefiting disadvantaged

1 communities.

2 --o0o--

3 AIR POLLUTION SPECIALIST PANSON: Now, let's move
4 on to the new program element. We propose incentives to
5 encourage in-state production of very low carbon
6 transportation fuels. We're designing these incentives to
7 complement related programs administered by the California
8 Energy Commission, California Department of Food and
9 Agriculture, and CalRecycle, which fund biofuel production
10 facilities and waste diversion projects.

11 Under our proposed approach, in-state producers
12 of very low carbon transportation fuels would be eligible
13 for per gallon -- a per gallon subsidy if the carbon
14 intensity of their fuel is at least 60 percent lower than
15 the comparable petroleum-based fuel. This is consistent
16 with the definition of very low carbon fuel in statute.
17 Renewable natural gas, biodiesel, and renewable diesel are
18 a few examples of eligible fuels.

19 Fuels with lower carbon intensities, meaning they
20 provide greater GHG benefits would receive higher
21 incentives. And an extra incentive would be available for
22 the use in-state feedstock.

23 We're interested in incorporating a disadvantaged
24 community component to this incentive and we're continuing
25 to work with community groups and fuel producers to figure

1 out how that would work.

2 --o0o--

3 AIR POLLUTION SPECIALIST PANSON: In addition to
4 the pending low carbon transportation and fuels funding,
5 there is about \$29 million for AQIP in the approved State
6 budget. We recommend directing AQIP funds to projects
7 that primarily provide criteria pollutant and toxics
8 benefits, and thus are not the best fit for auction
9 proceeds funding.

10 As the table on this slide shows, most of the
11 funding would be directed to the Truck Loan Assistance
12 Program to meet expected demand from truck owners over the
13 next year. This is a key program to help small fleets
14 upgrade their trucks to meet the requirements of the truck
15 and bus regulation. Demand has steadily increased in
16 recent years, and these funds truly go to those most in
17 need of assistance with about 60 percent of the loans
18 issued to truckers owning a single truck.

19 We also recommend funding to scale up the
20 agricultural equipment trade-up pilot for the San Joaquin
21 Valley that's launching this year. This project is
22 designed to help smaller farming operations that are not
23 well served by existing incentive programs, which provide
24 funding for new equipment purchases. And we're also
25 setting aside a small fraction of the AQIP funds as a

1 reserve for revenue uncertainty as we've done in recent
2 years.

3 --o0o--

4 AIR POLLUTION SPECIALIST PANSON: On final issue
5 is that the legislature deferred action on the
6 administration's cap-and-trade expenditure plan. Thus,
7 the cap and -- the low carbon transportation and fuels
8 funding was not part of the State budget passed last week.
9 That part of today's proposal remains contingent on
10 legislative action. We may experience some implementation
11 delays, depending on when this funding is approved. We're
12 already in a waiting-list mode with CVRP. And we expect
13 HVIP will need to start a waiting list within a month or
14 so.

15 We'll carefully monitor the ongoing budget
16 deliberations, and we would return to the Board for
17 further direction, if necessary, once the auction proceeds
18 budget is signed, as we did last year.

19 --o0o--

20 AIR POLLUTION SPECIALIST PANSON: In closing,
21 this year's plan builds on previous investments to reduce
22 greenhouse gas, criteria pollutant, and toxics emissions
23 by advancing the cleanest available technologies. These
24 projects will continue to focus on achieving emission
25 reductions in the disadvantaged communities that need them

1 the most. We recommend that the Board approve the
2 proposed plan.

3 This concludes my presentation. And at this
4 time, I'd like to invite Andre Freeman, from the
5 California Energy Commission, to say a few words.

6 MR. FREEMAN: Good morning, everyone. My name is
7 Andre Freeman from the California Energy Commission's
8 Alternative and Renewable Fuel and Vehicle Technology
9 Program. I just wanted to take a minute to express the
10 Energy Commission's support of this well-crafted
11 investment plan. I'd also like to personally commend the
12 staff and all the hard work that they've put into this. I
13 know the document is not an easy document to prepare each
14 year. And looking at the size of it, our -- I'm glad that
15 ours is about half the size.

16 (Laughter.)

17 MR. FREEMAN: This is an especially difficult
18 challenge for all the State agencies that have similar
19 funding programs, especially in a time of constantly
20 changing budgets. As Mr. Corey mentioned, ARB staff has
21 spent a lot of time working with the other agencies to
22 make sure that our relatively limited funding pots are all
23 coordinated, so that we can get the best use out of all of
24 our funding.

25 Staff has spent -- ARB staff has spent time with

1 Energy Commission staff to specifically define important
2 areas of interest, develop specific solicitation details
3 where our complementary solicitations will leverage each
4 other's findings, as well as sharing stories of success,
5 so that in future solicitations, we can pull the best
6 projects out of them.

7 As a member of the California sustainable
8 fraction action team between the Air Resources Board,
9 Caltrans, the Energy Commission, GO-Biz, and our parent
10 agencies, I definitely would like to mention that this
11 plan is a good representative example of the type of
12 funding opportunities that were defined through that
13 project.

14 In the action plan, the specific projects were
15 identified, as well as general funding areas that will
16 continue to support the development of the freight sector
17 throughout California. This plan, and especially the
18 medium and heavy duty portions of this plan are focused on
19 the solutions that, through working with outside
20 stakeholders we have seen to, that will provide both near
21 term and longer term air pollution reductions throughout
22 the State.

23 The funding allocated to the further development
24 and deployment employment of the medium- and heavy-duty
25 vehicles and cargo handling equipment are going to provide

1 a specific benefit to those hardest hit communities
2 throughout California, especially those surrounding the
3 major freight corridors. This is a very important point
4 that we continue to emphasize throughout all of our
5 funding programs. Not to diminish the ongoing successes
6 and challenges in the light-duty vehicle sector, but as
7 Andy just mentioned, the medium- and heavy-duty sector
8 proposes a very important challenge that I think the State
9 agencies are definitely rising to meet.

10 With that, I'd like to thank the Air Board for
11 the consideration of this item, and I look forward to the
12 ongoing coordination and collaborative activities that we
13 have between our agencies.

14 Thank you.

15 CHAIR NICHOLS: Thank you very much. Thanks for
16 being here, and for all the collaboration that we've seen
17 recently in the last few years. I think we've been able
18 to strategically target the investments from both of our
19 agencies and achieve more than the sum of the parts. So
20 it's great.

21 Okay. I think now we will hear from the
22 witnesses who've signed up to speak to us then. I have
23 the first sheet which has 20 names on it. And I guess
24 they're up there on the Board. So behind me, they're
25 projected so you can see where you are in line. And our

1 first person who signed up was Senator McGuire. I
2 understand he might not be able to be here. And so Kelly
3 Burns is speaking on his behalf.

4 Hi.

5 MR. BURNS: Hi. Thank you.

6 Senator McGuire would just like to thank everyone
7 for the proposal to invest in rural California and provide
8 the rural school bus districts the tools they need to
9 improve their air quality. Last year, you might have
10 remembered that you received a letter of 18 -- from 18
11 different legislators showing strong support for the
12 allocation of the school buses.

13 You know, this is just very important, because
14 rural areas are disproportionately impacted because they
15 have longer commutes and limited transportation
16 alternatives, and also less discretionary funding. So
17 staff proposal is a modest, but necessary, investment that
18 will have a significant impact on the State's air quality
19 and the health of thousands of California students, so
20 thank you very much.

21 CHAIR NICHOLS: Thank you. I wish I could give
22 extra funding for people who take less than their full
23 three minutes --

24 (Laughter.)

25 CHAIR NICHOLS: -- but unfortunately --

1 (Laughter.)

2 BOARD MEMBER RIORDAN: And supporters.

3 CHAIR NICHOLS: Add supporters too, that could
4 get you extra points.

5 Thanks very much.

6 (Laughter.)

7 CHAIR NICHOLS: Fred Minassian. You can just
8 come on up. You don't have to wait to be called.

9 MR. MINASSIAN: Chair Nichols, members of the
10 Board, good morning. I'm Fred Minassian, Assistant
11 Deputy Executive Officer at the South Coast AQMD. On
12 behalf of our agency, I would like to express our support
13 for the proposed plan for low carbon transportation and
14 the air quality investment program.

15 The proposed plan is crucial for the
16 demonstration of advanced zero emission technologies and
17 their commercial deployment in the on- and off-road
18 categories. The South Coast AQMD strongly supports the
19 deployment of zero emission port technologies, such as
20 yard hustlers, gantry cranes, forklifts, and related
21 infrastructure.

22 Air districts and CARB have a long and successful
23 history of implementing State's incentive funding
24 programs. We propose to continue this relationship for
25 the commercial deployment phase of this program. We

1 believe local implementation of the program will have
2 several benefits. It will enhance distribution and
3 tracking of the funds in environmental justice areas.

4 Furthermore, through our robust and pre- and
5 post-inspection program, we will be able to combine the
6 deployment of the new technologies with the requirement of
7 replacing the older equipment.

8 This, rather than just funding new technologies,
9 will increase the overall emission reductions of the
10 program. In addition, leveraging the public's one big
11 goods movement program with low-carbon transportation
12 funds is already allowed per CARB's program guidelines.
13 We propose increased coordination between CARB and air
14 districts for a single point and easier access to these
15 funds by the applicants.

16 Lastly, there is a need to identify additional
17 funding sources if the South Coast AQMD is to attain
18 federal air quality standards.

19 We stand ready to work closely with your staff in
20 seeking additional funding opportunities. Again, the
21 South Coast AQMD supports the proposed plan. I thank you
22 for the opportunity to speak.

23 CHAIR NICHOLS: Thank you. I'm going to ask
24 staff to respond to the suggestions, but I'd like to wait
25 until we've heard from all the other witnesses.

1 Thank you. Okay.

2 MR. FOURNIER: Good morning, Madam Chair, members
3 of the Board. My name is Anthony Fournier, and I'm here
4 on behalf of the Bay Area Air Quality Management District
5 this morning to speak in favor of the proposed 2016-17
6 funding plan for AQIP and low carbon transportation
7 investments.

8 I'd like to first thank Mr. Corey and his staff
9 for putting together such a comprehensive and well-crafted
10 plan. The plan supports zero and near zero emission
11 technologies and will reduce a significant amount of
12 greenhouse gas emissions and continues where the 2015-2016
13 plan had left off.

14 Also, as you can see by the number of written
15 comments that have been received, staff has done an
16 excellent job with the public workshop process, and has
17 been able to engage a broad range of stakeholders
18 throughout the process.

19 Now, I want to reference the CAPCOA comment
20 letter that was submitted as part of the public comment
21 period, and just note that our district supports all of
22 the remarks that were made in that letter. Additionally,
23 we support the expansion of the EFMP Plus-Up program
24 beyond the initial pilot areas. This will allow more
25 disadvantaged communities access to the incentive funds

1 and further our district's efforts to deploy zero emission
2 vehicles in the Bay Area.

3 We support the staff's proposal to award 2016-17
4 low carbon transportation funds to advanced technology
5 pilot demonstration projects that were submitted, but
6 unfunded, under the prior truck and bus solicitations that
7 were oversubscribed.

8 We support the continued funding for advanced
9 technology pilot demonstration projects, the focus on
10 trucks, buses, off-road equipment, and specifically
11 freight applications. And we see the need to make sure
12 that these types of projects remain a funding priority
13 into the future, in order to transition from the
14 demonstrations-style projects into more of the
15 commercialization and deployment, where we can see more of
16 the real benefits.

17 Finally, we support the proposed contingency
18 provisions that will allow the Executive Officer to
19 redirect funds from programs with low interest as needed.

20 We look forward to continuing our partnership
21 with your staff in support of this plan, and the effective
22 allocation of future State funds.

23 Thank you for your time.

24 CHAIR NICHOLS: Thank you.

25 MR. MAHER: Good morning, everyone. My name is

1 Mike Maher and I am with Cummins Pacific. I want to thank
2 you for the opportunity to provide these comments and also
3 those that we've already submitted.

4 I'm here to speak to the low NOx engine incentive
5 program. We appreciate the willingness of the ARB staff
6 to better understand the Cummins Westport ISLG near zero
7 engine, and its unique market factors related to its
8 roll-out.

9 We support the decision of the ARB to increase
10 the incentive to \$18,000 per unit. This will not cover
11 the entire incremental cost associated with the purchase
12 of that engine. However, when combined with other
13 incentive programs, it will encourage heavy-duty owners to
14 purchase near zero engines, and repower with near zero
15 technology. Without additional incentives, it may not
16 have the desired effect on fleet conversion as we'd like.
17 We'd also support the renewable fuel requirement, when
18 combined with near zero natural gas engines. Renewable
19 natural gas will help California reduce CNG and criteria
20 pollutant emissions. This is the most economical solution
21 to achieve these goals.

22 It should be noted that some heavy-duty operators
23 may view the renewable fuels requirement as a barrier to
24 taking advantage of the program. Therefore, it is
25 important that the total incentive package is adequately

1 funded to cover most of the incremental costs between an
2 existing natural gas engine and a near zero engine. We
3 want to thank you for the opportunity to make these
4 comments, remain committed to the ARB, the staff to make
5 this program as successful as possible to help California
6 achieve its emission goals.

7 Thank you very much.

8 CHAIR NICHOLS: Thank you. I believe there are
9 other witnesses who are going to make similar comments or
10 at least have support for that perspective that was just
11 articulated. And I think it might be a good idea to have
12 the staff comment now on why, assuming you don't agree
13 with that recommendation, or why you made the
14 recommendation you did in terms of limiting the amount of
15 funding for these types of vehicles, and you can explain
16 your thinking anyhow.

17 MOBILE SOURCE CONTROL DIVISION CHIEF KITOWSKI:

18 Sure. Let me start by acknowledging the work
19 we've done with Cummins Pacific and others in this area,
20 and that we are strongly supportive of the low NOx engine
21 with renewable fuels. We have already integrated it into
22 our AQIP program. We've integrated into Prop 1B. This
23 proposal would integrate it here into the Low Carbon
24 Transportation Program, and we're working to integrate it
25 into the Carl Moyer Program when it comes back. So we are

1 looking at it comprehensively.

2 You could look at this a number of ways. And I
3 will focus on the -- and note that Mr. Maher was
4 supportive of the 18,000 for the purpose it was doing.
5 And so I think that's the point that I'll focus on in my
6 comments, because the objective we were trying to achieve
7 was basically there are a lot of -- this is the Cummins
8 8.9 liter -- there are a lot of those engines sold every
9 year, about 2,000 sold in California every year.

10 They primarily go in transit and refuse
11 applications. And our objective was to provide a source
12 of funding that was easy to access, ease to implement, it
13 was straightforward for folks. It's a voucher program in
14 a proven system, where folks who were going to buy the 8.9
15 liter conventional engine, now could buy the 8.9 liter low
16 NOx engine with renewable fuels and not be out any
17 additional funding. So it's only covering that increment.

18 It's not trying to do more and expand the market,
19 and people to get the conversion from diesel to natural
20 gas, which is a worthwhile endeavor itself, but, you know,
21 is a broader -- is a broader goal. So the amount of
22 funding we have quite significant, \$23 million in this
23 pot, will be able to convert -- I think it's about, if I
24 did my math right -- it's about 1,300 engines. And so
25 2,000 sold every year. If we're pretty successful, we

1 will be able to fund the majority of those. If we're
2 wildly successful and everybody comes in, we will run out
3 of money. And if we had provided more funding than the
4 incremental cost or tried to expand the market and do more
5 with this, we just wouldn't have enough money.

6 So that's why we relied on that point, but
7 we -- for the objective we were trying to do, we are
8 trying to cover the full incremental cost.

9 CHAIR NICHOLS: But are there other programs,
10 either ours or other people's, that would deal with the
11 other issue that was raised here by Mr. Maher?

12 MOBILE SOURCE CONTROL DIVISION CHIEF KITOWSKI:

13 Yeah, certainly. The California Energy
14 Commission, as I said, the Prop 1B program, and the Carl
15 Moyer Program, we'll look at that, local air districts
16 have funding. So there are other programs. You know,
17 certainly we always can use more in a lot of these
18 programs. But there are other programs available out
19 there and people are very comfortable for many years now
20 in that transition to natural gas.

21 CHAIR NICHOLS: Do you think -- this maybe goes
22 back to an earlier comment. But again, since we have a
23 lot of people here who are obviously very well versed in
24 these programs, that an ordinary owner of a kind of
25 vehicle that would be suitable for this would understand

1 that there -- that these other sources exist. In other
2 words, are we doing everything we could do to try to
3 coordinate the information and make it readily accessible
4 to people, so they don't have to go from one place to
5 another, and, you know, do a whole lot of research every
6 time if they're trying to find funding to clean up their
7 fleet?

8 MOBILE SOURCE CONTROL DIVISION CHIEF KITOWSKI:

9 Yeah, that's a really good point, a really good
10 question. It's certainly a lot easier when you're dealing
11 with transit agencies and refuse haulers who are very
12 comfortable with this. We coordinate with dealers a lot
13 and the dealers are comfortable enough with the funding
14 that's available, and the options, and how to work through
15 the system.

16 The voucher program that I'm talking about here
17 is actually completely run through the dealer, so that it
18 comes off the purchase price, and the applicant never has
19 to touch the cash. But as you're -- as we're looking and
20 we want to expand this program to more and more people, it
21 means getting to harder and harder groups, outreach
22 becomes more important, those efforts become more and more
23 important, and those are efforts that we are continuing.
24 But at this point, we have -- we believe we have more than
25 enough demand to be able to cover the costs we're -- you

1 know, the funding we have available.

2 CHAIR NICHOLS: Okay. Let's return to the
3 witnesses then.

4 Mr. Tree.

5 MR. TREE: Good morning, Chair Nichols, members
6 of the Board. Richard Tree, City of Porterville. And on
7 behalf of the City of Porterville, we voice our support
8 for the proposed funding plan. And more importantly, we
9 support staff's proposed low carbon transportation
10 allocation of 42 million for the zero emission bus pilot
11 commercial deployment project.

12 As staff noted, the San Joaquin Valley has two
13 projects that have been preliminarily selected for
14 funding, and we're very proud of that. A total of 21
15 million in funding is coming -- is expected to come to the
16 valley through this grant solicitation, ensuring that a
17 portion of cap-and-trade funds are directed to the valley,
18 particularly given that the valley is home to 23 out of
19 the top 30 disadvantaged communities in the State.

20 As staff notes, the proposed allocation would
21 fund an estimated 43 buses, and provide an estimated
22 39,000 metric tons of CO2 equivalent GHG emission
23 reductions.

24 Should there be a revised plan in the future, we
25 ask that the ARB to continue to fully fund the zero

1 emission bus pilot commercial deployment project. We
2 support the proposed funding plan, which will produce
3 projects that maximize reductions in GHG emissions, and to
4 ensure that California, and more importantly, the valley
5 meets its climate goals.

6 Thank you.

7 CHAIR NICHOLS: Thank you.

8 MR. COX: Good morning. Monty Cox, Transit
9 Manager City of Visalia.

10 And I'm grateful for this opportunity to come and
11 speak with you. We are apart of the project that was --
12 the other project that was awarded for the -- in the San
13 Joaquin Valley. We have been grateful for the partnership
14 that was formed to create that project, and the
15 partnership that we have had over the years with the Board
16 and with our air district to accomplish these projects.

17 We just completed 100 percent of converting our
18 buses -- our bus fleet in Visalia to 100 percent natural
19 gas. And we are excited to go to this next step now to
20 start converting our fleet to zero emission buses. And
21 this project will help start that, and get us a long way
22 down the road, but we want to make sure that these
23 opportunities are going to continue.

24 So we're here to support the plan to continue
25 funding these programs, and to provide additional funds in

1 the future, so that we can continue to take advantage of
2 that. Without these partnerships, the City of Visalia and
3 several of our bus operators in the Central Valley would
4 not be able to do so. We're -- these are critical to us.

5 So thank you. And again, we want to support your
6 plan to continue these efforts.

7 CHAIR NICHOLS: Okay. Thanks.

8 MS. REES: Good morning, Madam Chair and members
9 of the Board. I'm Kathryn Rees. I represent Southwest
10 Airlines. We're here to encourage you and to support the
11 inclusion of aviation fuel production within your low
12 carbon incentive fund. Producers can, as you know, make
13 both renewable diesel as well as renewable aviation. If a
14 producer is incentivized to do one and not the other, the
15 incentive is there to do one and not the other.

16 So as a result, Southwest certainly would
17 encourage the inclusion of the aviation fuel. We want to
18 be able to have producers producing.

19 So thank you very much. And I stayed under three
20 minutes, Madam Chair.

21 (Laughter.)

22 CHAIR NICHOLS: Yes, you did. Extra credit.

23 MR. TAYLOR: Good morning. Tim Taylor on behalf
24 of the Airlines For America, representing major U.S.
25 airlines.

1 A4A is testifying to request that the Board
2 include sustainable alternative jet fuel, also known as
3 biojet fuel as an eligible fuel under the proposed very
4 low carbon fuel incentive program. A4A's members are part
5 of a global aviation coalition that has adopted aggressive
6 GHG reduction goals going forward, including achieving
7 carbon neutral growth from 2020.

8 One key strategy to achieving these goals is the
9 use of biojet. In California, United Airlines has
10 executed an agreement with AltAir Fuels for the purchase
11 of up to 15 million gallons of biojet over three years,
12 and, in fact, began using biojet at a LAX in March of this
13 year.

14 Unfortunately, the production of biojet is
15 currently disincentivized in California because producers
16 can currently only generate credits under the Low Carbon
17 Fuel Standard for ground transportation fuels. The
18 proposed very low carbon fuel incentive program provides
19 an important opportunity to help eliminate the current
20 market disincentive to produce or purchase biojet in
21 California by creating a structure that equalizes
22 available incentives for different types of fuels.

23 An incentive at parity with incentives obtained
24 for other fuels under the LCFS would eliminate unnecessary
25 market distortions and facilitate airline support for the

1 industry. Airlines stand ready to support the California
2 alternative fuels industry, and are uniquely situated to
3 help obtain financing for the expansion of the industry
4 through dedicated off-take agreements.

5 Allowing biojet to qualify under the very low
6 carbon fuel incentive program would help California and
7 the airline industry to achieve our mutual climate goals.

8 Thank you very much. Appreciate it.

9 CHAIR NICHOLS: Thanks.

10 MS. LEVIN: Good morning, Chair Nichols and
11 members of the Board. Julia Levin with the Bioenergy
12 Association of California. I want to start by thanking
13 staff. We have met with staff many times in the past
14 year, and they've been very receptive and very thoughtful
15 in proposing some of the changes to the plan. We are
16 particularly supportive of the new inclusion of the
17 funding for biofuels, which right now provide the largest
18 share of low carbon fuels in California helping to meet
19 the Low Carbon Fuel Standard, and actually provide the
20 lowest carbon transportation of any kind. We strongly
21 support that new addition. We also support the addition
22 of funding for low NOx trucks. But we have two big
23 recommendations.

24 I'd like to echo the comments and the
25 recommendation from the gentleman from Cummins Westport.

1 We think it's very important to increase the per truck
2 incentive for the new ultra low NOx truck engines that are
3 available. This is really a break-through technology, and
4 it is going to take a larger per-truck incentive to get
5 these trucks on the road quickly.

6 That leads me directly to our second, and much
7 bigger recommendation, which is across the board we urge
8 that Air Board to put more emphasis on the reduction of
9 short-lived climate pollutants. I don't know if that
10 terms is ever even mentioned in the \$500 million low
11 carbon transportation fund proposal. And it's ironic,
12 because in this Board's own proposal on short-lived
13 climate pollutants, it says repeatedly that it's really
14 critical to take immediate short-term actions to reduce
15 short-lived climate pollutants to prioritize public
16 funding for the reduction of short-lived climate
17 pollutants, and that doing so not only is the most
18 important and urgent thing we can do to change the
19 trajectory of climate change, but also to provide
20 immediate benefits, including really significant benefits
21 in disadvantaged communities, where we can reduce the
22 pollution from diesel-powered heavy-duty trucks.

23 The two biggest sources of short-lived climate
24 pollutants, as you know, are black carbon from wild fire,
25 and methane emissions from dairies. Both of these can be

1 reduced immediately by instead converting that organic
2 waste into low carbon transportation fuels.

3 And the last thing I want to note is yesterday
4 CalFire released the updated estimate of how many dead
5 trees we have in the Sierras. And just since last fall,
6 we've gone from 29 million dead trees to more than 66
7 million, and that's just in six counties. We know it's
8 more than that, if you look statewide.

9 Instead of shipping those trees to China to be
10 used for cement manufacturing, which is actually one of
11 the proposals on the table right now, we could be creating
12 jobs, and creating low carbon transportation fuels,
13 reducing air pollution and black carbon emissions from
14 wild fire, as well as methane from dairies and from urban
15 organic waste.

16 So we think it is highly appropriate to put more
17 of the money for ultra low NOx trucks that can run on
18 biofuels made from organic waste.

19 Thank you.

20 CHAIR NICHOLS: Thank you.

21 MS. LEE: Hello. My name is Yoshimi Lee with
22 Mitsubishi Motors. Thank you, Chairman Nichols and the
23 Board for the opportunity to provide comments.

24 Mitsubishi Motors supports the proposed funding
25 plan, and we appreciate staff's hard work on putting this

1 proposal together. We believe CVRP is a key incentive to
2 support zero emission technology and increase ZEV market
3 demand. We would like to highlight the following four
4 issues: We support point-of-sale rebate to qualify --
5 pre-qualify buyer. We support staff's recommendation to
6 increase the CVRP funding over the next three years. We
7 agree with staff's conclusion that the ZEV market would
8 not be sustainable for at least the next five to 10 years.
9 We believe it is still too early to discuss decreasing the
10 CVRP incentive amounts or limiting their availability.

11 Mitsubishi Motors appreciate your consideration
12 of our comment, and we look forward to working with you
13 and the ARB staff to ensure continuous success of the CVRP
14 program.

15 Thank you.

16 CHAIR NICHOLS: Thanks.

17 MS. SKIVER: Good morning, Madam Chair and
18 members of the Board. My name is Lauren Skiver. I'm CEO
19 and general manager for Sunline Transit Agency, which
20 serves nine cities in the Coachella Valley and
21 unincorporated Riverside County.

22 I first want to thank you and the ARB staff for
23 the enormous amount of time you put in to reach out to
24 transit agencies to better understand the complex
25 environment we operate in and how zero emission technology

1 affects our fleets. The significance of this funding
2 program is enormous. We all know that to achieve goals
3 set by leadership, we must have a combination of
4 incentives and regulation. Like all major shifts,
5 uncertainty in funding is the most devastating variable in
6 the continuing momentum we have worked so hard to create.

7 Transit leaders are concerned that lasting
8 support will be available and that the risks they take in
9 deploying ZEVs may recreate an unfunded mandate.

10 Sunline has been a longstanding advocate for
11 alternative fuels and environmentally focused initiatives.
12 We have proven that transit should and can be
13 environmentally focused and do everything in its power to
14 create these programs, but our success was due to
15 opportunity and funding.

16 If we are going to require a commitment from
17 transit to operate zero emission technology, we must have
18 a commitment to funding, not only that that's already been
19 awarded but to future streams that will be available for
20 transit operators.

21 Sunline has given me the opportunity to see an
22 agency that has taken an enormous investment and made a
23 successful program out of it. It's not just the future
24 that's at stake here, it's the millions of dollars that
25 have been invested in the past to create zero emission

1 technology that really works.

2 Sunline stands with you committed to educate
3 other transit properties, support ARB and other entities
4 that are looking at clean air initiatives, and to continue
5 programs that improve our environment. We have more
6 transit agencies than ever right now that are committed
7 and willing to operate zero emission technology. We can't
8 afford to lose this momentum, and I thank you very much
9 for your time.

10 CHAIR NICHOLS: Thank you.

11 CAPCOA EXECUTIVE DIRECTOR ABBS: Good morning,
12 Madam Chair and members of the Board. My name is Alan
13 Abbs. I'm the Executive Director with the California Air
14 Pollution Control Officers Association representing the 35
15 local air districts in California.

16 For starters, I'll echo what Anthony Fournier and
17 Fred Minassian said and I'll keep it relatively short.
18 CAPCOA submitted a comment letter on June 6th about the
19 low carbon transportation plan. We have very -- we're
20 very excited about the rural school bus pilot funding that
21 would upgrade rural school bus fleets with electric and
22 renewable fuel buses. And we think it's going to be a
23 very successful program, and it will be oversubscribed as
24 soon as we're ready to start.

25 We also support the expansion of the Enhanced

1 Fleet Mod Plus-Up Program. The South Coast Air District
2 and San Joaquin have shown that these programs can be very
3 successful. And I think we're ready to expand that to
4 other parts of California that have similar needs in
5 reducing older higher emitting vehicles with new advanced
6 technology vehicles.

7 And lastly, I'd just like to remind the Board of
8 the past partnerships between ARB and the local air
9 districts. When you look at the programs like Prop 1B,
10 Carl Moyer, and all the other incentive funding programs
11 that we've jointly administered, we've been able to get
12 over \$2 billion in incentive funding out throughout the
13 State of California. And we've done it in a way that's
14 transparent and has provided quantifiable emission
15 reductions.

16 And so as we move forward, just as a reminder, we
17 have experience developing and managing incentive
18 programs, extensive local community and local industry
19 knowledge, and experiencing coordinating complex projects.
20 And we highly recommend continuing this partnership moving
21 forward as this plan moves forward.

22 Thank you.

23 CHAIR NICHOLS: Thank you.

24 MR. DOUGLAS: Good morning, Madam Chair, members
25 of the Board. I'm Steve Douglas with the Alliance

1 Automobile Manufacturers.

2 And you should have a joint letter from the
3 Alliance and Global Automakers. We represent together
4 about 99 percent of the new vehicles sold in California,
5 and we support the funding plan.

6 I'd also like to thank the staff. They've done a
7 terrific job coordinating. It's a very large group of
8 stakeholders, very passionate, and I think they've done --
9 they've done a great job listening to and working with the
10 stakeholders to reach what at least we believe is a
11 package that balances the input of the stakeholders, the
12 requirements of the law, and the direction of the Board.

13 Just a few things to point out. Manufacturers
14 now offer 29 different ZEV models, 29 different ZEVs,
15 so -- and more coming every day. And we're also starting
16 to see the second generation ZEVs with longer ranges,
17 better performance, and that -- and these are compelling
18 vehicles that are offered at extraordinarily reasonable
19 lease rates and prices.

20 And, of course, for its part, California offers a
21 range of incentives, both HOV lane and then financial
22 incentives as well. But with all of this, ZEVs still make
23 up only three percent of the new vehicle market in
24 California. And surveys indicate that consumer awareness
25 is still really low.

1 So we face a pretty enormous challenge of growing
2 this market by 500 percent over the next nine years. And
3 just for perspective, that would put it at three times the
4 sales rate of current hybrid vehicles, just conventional
5 hybrid vehicles, which have been on the market for 17
6 years.

7 CVRP, the HOV lane access, those are critical
8 elements to growing this market to meeting our goals. We
9 are committed to working with ARB and others to reduce the
10 fiscal impact of this program. However, at this point,
11 it's just far too early to begin discussions of ramping it
12 down or limiting the scope of the program. So we agree
13 with the staff, as far as self-sustaining. It's five to
14 ten years out. And this is probably the most critical
15 period of the ZEV market, and it determines the future for
16 decades to come.

17 One more point, point of sale. We support the
18 point of sale. It's really important for low and moderate
19 income community or purchasers that they receive the
20 rebate at the dealership, so they don't have to wait for
21 weeks or now months to get the rebate. Again, in summary,
22 we support the proposal. We recommend you adopt it. And
23 we'll continue to work with ARB, the legislature, and the
24 administration to fund the funding plan.

25 Thank you.

1 CHAIR NICHOLS: Thank you.

2 MR. WALLAUCH: Good morning. This is -- I'm
3 Steve Wallauch with Platinum Advisors here on behalf of
4 the Center for Transportation and the environment.

5 CTE has several projects I'll try and be brief.
6 Yeah, we're here to mainly highlight one of the projects
7 that they've kind of organized here was the fuel cell
8 electric bus commercial consortiums project and the
9 support they have for the expenditure plan that you have
10 before you.

11 This is a project that will advance the
12 commercialization of fuel cell buses. And CTE has
13 organized a consortium consisting of the largest transit
14 operators in the State with OCTA a AC Transit, as well as
15 the leading manufacturers in technology with riders for
16 buses, fuel cells, and fueling infrastructure, which
17 includes New Flyer, Linde, and Ballard.

18 The significance of this project is to reduce
19 unit cost by 50 percent for these fuel cell buses and set
20 the stage for making fuel cell electric buses affordable
21 through higher production volumes and a viable option to
22 meet the California zero emission vehicle goals.

23 This is technology that also could translate over
24 into the other heavy-duty sectors with freight and trucks
25 as this technology develops.

1 This is a no-risk project. We have, you know --
2 successful with the transit operators, with the
3 manufacturers that are involved in this. We urge your
4 support for the six manager plan and we extend our support
5 and efforts in trying to get this funding available.

6 CHAIR NICHOLS: Thanks.

7 MR. PEEPLES: Chair Nichols and members of the
8 Board, my name is Chris Peeples. I'm an elected at-large
9 director of the Alameda Contra Costa Transit District.
10 And I am currently serving as its board. And we support
11 the staff's proposal here today. But I'm here to talk
12 specifically about the consortium proposal.

13 As you know, we have been running fuel cell buses
14 for about 10 years. We have a fleet of 13. Most of you
15 have ridden on them. If you haven't, I will be happy to
16 arrange a ride. But we, together with Sunline, who is the
17 progenitor of all this stuff in California, have proven
18 the reliability and the durability of fuel cell buses.

19 The fuel cell buses are running about as reliably
20 as diesel buses. The senior fuel cell bus in our fleet
21 was originally warranted for 4,000 hours. It now has
22 23,000 hours on it. So they work.

23 The issue has been the cost. Our current buses
24 are \$2.5 million each. That's a lot of money. The
25 consortium grant together were another grant you've got

1 for Sunline is going to result in a build of 25, which is
2 going to allow New Flyer, the largest bus manufacturer in
3 North America, to deliver a buy-America bus at half the
4 cost of our current fleet.

5 If you go further than that and look at what
6 happened in Europe, they have done a tender for 100 bus
7 buy, and they've got five offers to supply those buses at
8 650,000 Euros. That's about \$725,000.

9 I just got a message from Jamie Levin, who you
10 all know, who is up at Ballard in Canada, where he just
11 drove a \$300,000 Chinese bus. That's from a build of 300.
12 So this grant is really critical to drive the price of
13 this proven technology down to within spitting distance of
14 CNG or hybrid diesel. So we hope you will do that, and
15 thank you very much.

16 CHAIR NICHOLS: Thank you. Thanks for all your
17 pioneering work on these buses too.

18 MS. TOPP: Thank you, Madam Chair and members.
19 Moira Topp speaking on behalf of the Orange County
20 Transportation Authority, also known as OCTA, in support
21 of the item before you. We, too, are part of the
22 consortium that was discussed by the last several
23 speakers.

24 OCTA has a long history of taking actions to
25 integrate new technologies within our transit fleet to

1 improve both the environment and increase the operating
2 efficiencies. OCTA currently has a fleet of about 560
3 buses, almost completely fueled by natural gas. In
4 addition, OCTA is taking steps to integrate new low NOx
5 engines and use renewable natural gas.

6 Hydrogen fuel cell technologies offer means for
7 transit agencies to maintain existing range and
8 reliability expectations, while also potentially reducing
9 long-term maintenance and operations costs. However, the
10 upfront costs, as you've heard, to secure these vehicles
11 and related fueling infrastructure is still quite high,
12 about double what existing natural gas buses cost.

13 This essentially makes the technology cost
14 prohibitive to most transit agencies impacted by continued
15 reductions in State transit funding. Funding secured
16 through the AQIP would allow OCTA to secure ten hydrogen
17 fuel buses and begin fueling infrastructure -- and begin
18 to build fueling infrastructure within the community.

19 This will allow OCTA to have a fueling station on
20 site, allowing hydrogen fuel -- the hydrogen fuel cell bus
21 fleet to grow, and no longer be reliant on outside fueling
22 locations.

23 These types of demonstration projects are
24 essentially important, as you, the Board, continue to
25 discuss the advanced clean transit regulation, which, as

1 currently proposed, would require transit agencies to
2 convert to 100 percent zero emission fleets by 2040.

3 These demonstrations outlined in the item before
4 you today will provide key information about how these
5 buses run in large and urban environments and about the
6 long-term costs. And lastly, I'd note -- just a note
7 about the importance of the appropriation. The item and
8 the procurement we have does have a certain shelf-life,
9 and it is critically important in order for us to -- we
10 have an older fleet that we're trying to replace. And in
11 order for us to move forward, we do need to have that
12 appropriation quickly.

13 Thank you.

14 CHAIR NICHOLS: Thank you.

15 MR. WARREN: Good morning, Chair Nichols, Board
16 members. I apologize for my voice. I feel much better
17 than I sound.

18 (Laughter.)

19 CHAIR NICHOLS: Good.

20 (Laughter.)

21 MR. WARREN: My name is David Warren. I'm the
22 director of sustainable transportation at New Flyer of
23 America. We're the largest transit bus manufacturer in
24 North America, in the U.S. We have operations in Fresno
25 and in Ontario. We produce, on the order of, 50 transit

1 buses a week of all different propulsion types. Now, this
2 includes clean diesel, it includes compressed natural gas,
3 including the Cummins near zero NOx engine with renewable
4 fuels that was mentioned. It includes diesel electric
5 hybrids, trolley electrics, battery electric buses, and
6 finally fuel cell buses.

7 Now, why are fuel cell buses so important? It is
8 the only zero emissions technology out there that can have
9 a range above 300 miles. It has the ability to
10 essentially replace any internal combustion engine one for
11 one in transit operation. New Flyer is currently building
12 North America's first 60-foot fuel cell electric bus. And
13 that bus will be deployed by AC Transit in 2017.

14 Now, it was mentioned earlier about the cost of
15 fuel cell buses. Buses, as I just mentioned, that 60-foot
16 fuel cell buses, those type of technology development
17 programs have been up over \$2 million to produce a bus of
18 that. With the AQIP program producing 20 or more of these
19 buses, New Flyer is able to offer these buses for \$1.2
20 million.

21 Now, based on that program being funded, AC
22 Transit has submitted another five buses to the Federal
23 Transit Administration for buses that we've committed to
24 produce for \$1.1 million.

25 And in 2014, we sent a letter to the California

1 Air Resources Board that with quantities above 40, we
2 could get the price of a fuel cell bus at \$900,000 or
3 below. Delay of the approval of this plan, and the
4 appropriation by the legislation, impacts our company.
5 We've reserved build slots based on a preliminary offer to
6 do this, and we are ready to proceed with the continuation
7 of this program. We are in full support of the program,
8 and I thank you for your time.

9 Thank you.

10 CHAIR NICHOLS: Thanks.

11 MR. NATESAN: Thank you, Chair, and the Board.

12 Nitin Natesan. I'm here representing Linde. We are the
13 world's -- one of the world's largest hydrogen technology
14 providers, service providers, and fuel providers. We are
15 also part of this consortium that the several last
16 speakers have been part of.

17 We have built in California built and service AC
18 Transit's two bus stations, which is one of the largest
19 bus fleets in the world. We also built and service the
20 largest hydrogen fueling facility in the world at BMW's
21 facility in South Carolina.

22 Linde has developed hydrogen fueling technology
23 to rapidly fuel buses back to back throughout the day to
24 meet the ever need -- changing needs of bus fleet
25 operators.

1 This project, and the programs like this, enable
2 us to reduce capital costs to move us on the journey
3 towards affordable infrastructure. Our technology is
4 capable of scaling up well past 10, 20, 50 even 100 buses,
5 and well over 1,000 kilograms a day.

6 This project helps us in our journey to also
7 facilitate heavy-duty applications in freight and
8 trucking. Additionally, what this project does is create
9 a base demand right now while we are waiting for
10 light-duty demand to rise and grow, and also create a need
11 for further renewable hydrogen production. So Linde is in
12 strong support of this project. Thank you for the
13 opportunity to speak.

14 CHAIR NICHOLS: Thanks.

15 MR. GRANT: Hi. My name is Jeff Grant and I'm
16 representing Ballard Power Systems. Ballard is the
17 largest manufacturer of fuel cell engines in the world for
18 transit buses, and is part of the AQIP project team with
19 AC Transit and Orange County.

20 There have been more than 100 Ballard-powered
21 fuel cell buses deployed around the world over the years.
22 And I want to speak to you about why the AQIP program and
23 this project is so important to Ballard from a technology
24 provider's perspective.

25 First off, the economies of scale allow a steep

1 reduction in the cost of the fuel cell module or fuel cell
2 engine, if you will. The cost of the module intended for
3 the AC Transit/Orange County project is about 30 percent
4 of the cost of that same module or similar modular that's
5 used in the current fleet of AC Transit buses. So we've
6 had a 70 percent reduction in six, seven years. So that's
7 very key, the economies of scale.

8 It also -- this cost reduction, it allows the
9 technology to diffuse into other applications that I think
10 are important for California, things like drayage trucks,
11 rubber tired gantries and things like that. So that's key
12 as well. The project also allows Ballard to invest in
13 U.S. manufacturing capabilities. And that's important,
14 because these modules have to meet Buy America
15 requirements. And there's competition, quite frankly, for
16 those investment dollars, because if we look at the rest
17 of the world, in Europe, there are 62 fuel cell buses in
18 operation, 21 currently being assembled, and another 142
19 planned for deployment between 2018 to 2019.

20 So there's a lot of activity. If I look at
21 China, Ballard has supply agreements to deliver modules
22 for 333 fuel cell buses in Rugao, in Foshan, and Yunfu.
23 And Chris Peeples spoke a little bit about, you know,
24 we've got one of the buses actually in operation at
25 Ballard.

1 So there's a lot going on globally with the
2 technology. California has always been a leader in the
3 implementation of zero emission technology. Continuing
4 this and appropriating money to this funding plan allows
5 California to stay in that position. And there's the
6 potential to generate significant jobs within the State
7 related to manufacturing, operations, and service.

8 So I want to thank you for your time, and sum up
9 my comments. We're fully in support of the funding plan.
10 We brief it provides the necessary scale to make a step
11 change in the commercialization of fuel cell electric
12 buses.

13 Thanks.

14 CHAIR NICHOLS: Thanks.

15 MS. WARD-WALLER: Good morning, Chair and
16 members. Jeanie Ward-Waller with the California Bicycle
17 Coalition. I want to thank you all for the opportunity to
18 comment today, and also -- I'll keep my comments fairly
19 brief. I want to generally align my comments with other
20 folks that will speak today from the SB 535 Coalition.
21 And we also submitted a letter to you.

22 So I think in particular within that letter we
23 support, you know, really putting a priority, or at least,
24 you know, sort of equal priority on those projects that
25 are providing real benefits to low income individuals

1 around the State in disadvantaged communities.

2 I also want to support and really thank staff for
3 working with us on considering how bikes can fit within
4 this program. The funding plan does contain
5 eligibility -- suggested eligibility for bike sharing.
6 And we really support that and have appreciated a lot
7 working with your staff within -- that's within the
8 mobility options pilot program.

9 I also want to appreciate that you're sitting
10 here today without a funding allocation from the
11 legislature, and just want to let you know that we are
12 working across the street to encourage the legislature to
13 get this funding out the door, so that we can start seeing
14 it go to good projects.

15 We've also submitted a separate letter to you
16 from a number of groups around the State, many by
17 coalitions and other community partners, proposing some
18 additional opportunities to fund bikes within this program
19 that we hope you will consider. As a new pilot, we think
20 that has great potential to get more folks, especially low
21 income folks, around the State into zero emission
22 transportation that also is healthy and provides a range
23 of other benefits. So thank you.

24 CHAIR NICHOLS: Thanks.

25 MR. CARMICHAEL: Good morning, Chair Nichols,

1 members of the Board. Tim Carmichael with Southern
2 California Gas Company here to support the plan. Very
3 appreciative of the inclusion of the 23 million for low
4 NOx near zero emission engines.

5 I want to propose two changes that we think would
6 make the plan significantly better -- that piece of the
7 plan significantly better. One, Chair Nichols alluded to
8 earlier, is the level of incentive. Staff is proposing
9 18,000. They're very focused on the scenario where a
10 transit agency or refuse operator is going to change out
11 the engine at mid-life for that vehicle. In that
12 scenario, the level of funding probably works. But for
13 other scenarios, we're very skeptical that it's enough.

14 And we do look at all the programs, not just this
15 one. We do consider the potential to combine. And
16 frankly, given the number of trucks that we're trying to
17 transform over the next decade, you want to combine where
18 you have to, but you don't want to combine all the time.
19 And we're worried about a scenario where this incentive
20 level is just a little bit too low. And as a result,
21 everybody that applies is looking for a combination
22 scenario, and you're eating up all of the incentive
23 funding, which is not really maximizing the benefits of --
24 maximizing the potential of the money.

25 We believe 25,000 is a better incentive level.

1 And yes, there's the potential for fewer trucks to
2 be -- or vehicles to be incentivized, but that's only a
3 problem if you believe this program will be fully
4 subscribed -- this portion of the program will bully
5 subscribed. We're skeptical of that. And as a result, we
6 think it's better to put a little bit more per vehicle and
7 ensure that it is fully subscribed.

8 The second issue we want to raise is the plan
9 includes a component to provide a bonus incentive --
10 different wording is used in the plan -- for vehicles that
11 are deployed to benefit disadvantaged communities, zero
12 emission vehicles, trucks, in particular. And we think
13 that is a good idea, but we also think that that approach
14 should apply to near zero technologies.

15 If the goal is really to protect public health,
16 protect community health, near zero, 90 percent lower,
17 emissions than what's on the road today, the best of
18 what's on the road today is a really good step forward.
19 And for, you know, approximately 15 percent bonus
20 incentive, to get fleets to make the choice to put these
21 newest cleanest engines in the most impacted communities
22 we think makes a lot of sense.

23 Thank very much.

24 CHAIR NICHOLS: Thanks. Saved by bid the bell.

25 Hi.

1 MR. IKERD: Thank you, Madam chair and members.
2 Jason Ikerd here today on behalf of the San Francisco
3 International Airport to express our support along with
4 our airline partners for inclusion of renewable aviation
5 fuels and the very low carbon fuel incentive program.

6 SFO has been an industry leader for many years
7 now in reducing greenhouse gas emissions at airports. It
8 continues to be a very high priority for SFO to do so.
9 The emissions from taxiing aircraft are a really large
10 part of an airport's emission's profile. And so we
11 believe it's incredibly important to find, you know,
12 innovative ways to reduce those emissions. We believe
13 that funding and offering incentives for the production
14 and use of renewable aviation fuels is an essential part
15 of doing that. And so again, we support their inclusion
16 in this program.

17 And I also just want to briefly mention that the
18 California Airports Council is in support of this as well.

19 Thank you.

20 MR. NOYES: Good morning, Madam Chair and members
21 of the Board. Graham Noyes. I'm actually appearing on
22 behalf of two different organizations this morning, so
23 I'll start with the more general, the Low Carbon Fuels
24 Coalition. We stand in strong support of the proposal,
25 and really appreciate the great work that has gone on at

1 all levels within the agency to think about the fuels
2 proposal.

3 I want to flag one particular aspect that's
4 already contained in the report. One that California
5 within its mobile source strategy now has a very
6 aggressive goal on the diesel side with this very low NOx,
7 very low PM diesel fuel. It's not there yet. It does not
8 exist from a production capacity standpoint in the
9 marketplace. So we're going to need to see new production
10 capacity established, hopefully here in California, to
11 meet that planned demand that we're going to have in this
12 State.

13 And so that is why the Low Carbon Fuels Coalition
14 has been participating throughout the process, and was
15 also supportive in trying to get the funding established
16 in the first place here for a production incentive, for
17 California, for long-term development of new projects in
18 this State. And that's referenced in, I believe it's,
19 page 83 here about the longer term plan, innovative
20 financing mechanisms, 10-year spending authority. We
21 support the discretion going to the Executive Officer to
22 continue with the workshops and hopefully implement those
23 components into this program.

24 Switching gears now. I also represent several
25 producers and plan producers of biojet fuels. We've been

1 hearing a lot about biojet here today. The aviation fuels
2 industry is very excited about what's happening in
3 California. We have AltAir Fuels, is one of my clients,
4 that is now producing in Paramount, California. Fulcrum
5 Bioenergy and Red Rock Biofuels are also planning to
6 provide biojet fuels to the state.

7 On another issue we're engaged already with top
8 folks at ARB around the concept of bringing aviation fuels
9 into the Low Carbon Fuel Standard, and we appreciate this
10 proposal that allows for certified fuels with carbon
11 intensity levels that meet the program requirements to
12 participate in this very low carbon fuels incentive
13 program. It's a great first step to bring aviation fuels
14 into the California program on an opt-in basis. And so
15 again, we express our support for this measure.

16 Thank you.

17 MS. VAN OSTEN: That's what happens when you
18 follow somebody tall.

19 Good morning. Kathy Van Osten, MVM Strategy
20 Group. And I'm here to represent United Airlines this
21 morning. A lot has been said, so I don't want to repeat
22 information. But I think first and foremost, we really
23 want to express to the Board and the staff how grateful we
24 are for the dialogue, that's taken place over the last
25 several months. We feel it's been very productive. We've

1 been able to answer questions, not only within this
2 program, but as we've looked at the LCFS program, which we
3 strongly support.

4 So I think rather than talk about AltAir, you
5 know, United launched its first commercial airline flight.
6 They're using renewable jet fuel in their daily operations
7 out of LAX. AltAir, Graham's client that he mentioned
8 earlier. They're the first facility in the globe around
9 the world that actually is tooled to make renewable jet
10 fuel.

11 And, you know, despite that fact, because of the
12 disparity in the incentives, we see that it's working for
13 the renewable diesel, because that's his preference to
14 produce. And with renewable aviation fuel, we do have an
15 off-take agreement. We have a three-year, 15 million
16 gallon agreement. We would like to purchase more, but
17 oftentimes we find that there's a lot of competition for
18 the time at that facility. We know that he wants to
19 increase his production by 300 to 400 percent, which is
20 magnificent.

21 We've got a lot of folks that are coming to the
22 table, other airlines, other international carriers who
23 would like to purchase the renewable aviation fuels. So
24 the demand is there. We would like to see other
25 facilities established in the State, perhaps through

1 reconfiguring other old or vacant facilities.

2 But for the most part, we just want to reiterate
3 that United Airlines we appreciate your work. We do
4 support renewable aviation fuels being included in the low
5 carbon fuels incentive program, and certainly encourage
6 your adoption of that, and look forward to working with
7 your staff and the Board in the future.

8 Thank you.

9 MR. PIMENTEL: Madam Chair and members, Michael
10 Pimentel with Shaw/Yoder/Antwih here today on behalf of
11 the California Transit Association, and the Boeing
12 Company. We'll be speaking to two specific aspects of the
13 plan.

14 So included within this funding plan is
15 significant new funding totaling 83 million for the HVIP,
16 zero emission bus, pilot commercial deployments, as well
17 as low NOx engine incentives. As you heard today, many
18 within my membership, whether they be transit agencies or
19 original equipment manufacturers, are looking to these
20 funding sources to facilitate the transition to ever
21 cleaner transit fleets, to help the State achieve its
22 greenhouse gas emissions reduction goals.

23 We are therefore a bit concerned by the most
24 recent cap-and-trade auction, which, as you all know,
25 resulted in a minor sale of emissions credits, and may

1 have some influence on the legislature's willingness
2 and/or ability to fully fund the plan.

3 We will continue to urge the legislature to fully
4 appropriate the \$500 million identified for this plan.
5 However, if that funding does not materialize, as was the
6 case in fiscal year 15-16, we will respectfully request
7 that the ARB, to the extent possible, maintain funding
8 levels for these programs and not zero-out funding as was
9 the case in this previous fiscal year.

10 Now, on behalf of the Boeing Company, I'd like to
11 speak to the very low carbon fuel incentives program. The
12 Boeing Company is proud to be not just the world's largest
13 aerospace company and largest U.S. exporter, but is proud
14 to work with nearly 3,000 businesses in California to
15 create jobs and economic opportunity in the aerospace
16 sector.

17 Boeing's environmental actions are another
18 example of our commitment to California and customers
19 seated here today, United Airlines and Southwest Airlines.
20 Boeing is committed to sustainable aviation biofuels
21 development to support our industry's sustainable and
22 reduce its carbon emissions. Produced sustainably,
23 aviation biofuels reduce carbon emissions by 50 to 80
24 percent compared to petroleum through its lifecycle.

25 Enabling sustainable aviation biofuels therefore

1 to participate in the very low carbon fuel incentives
2 program would create strong financial incentives for the
3 production of such fuels, which would allow the aviation
4 industry to better support both California's greenhouse
5 gas emissions reduction goals, as well as their industry's
6 objectives for carbon neutral growth.

7 Thank you so much

8 MR. LEACOCK: Good morning, Chair Nichols and
9 members of the Board. My name is Kent Leacock. I'm with
10 Proterra, a zero emission battery electric bus
11 manufacturer. Proterra supports the 16-17 proposed fiscal
12 year plan, and we would like to thank the leadership and
13 the staff of CARB for a thoughtful plan that addresses the
14 needs of multiple stakeholders and multiple categories of
15 low carbon transportation.

16 We think that the way they've allocated the funds
17 is fair and equitable and allows all the players in this
18 arena to have a chance to grow the greenhouse gas
19 reduction from their particular technology. So in
20 conclusion, we understand the challenges at the
21 legislature. And Proterra and many members of our
22 consortiums in the heavy-duty transit world will be
23 working hard to advocate at the legislature for the
24 approval of said funding. So we would encourage strongly
25 the approval of the plan.

1 Thank you.

2 MR. CHAVEZ: Madam Chair Nichols, members of the
3 Board, my name is Nicholas Chavez. And I'm here on behalf
4 of the California Association of School Transportation
5 Officials, and the School Transportation Coalition.

6 We are here in support of the rural school bus
7 replacement pilot program. Since last year, we've been
8 working with Senator McGuire who authored SB 523. And we
9 applaud the work of your staff. We've been working
10 collaboratively with Senator McGuire in replacing these
11 old dirty buses that are not only dangerous to the
12 students, but the environment as well.

13 This program is essential in replacing buses in
14 districts hard pressed to do so on their own, as a result
15 of limited discretionary funding and local resources for
16 replacement. If approved the grant opportunity would
17 offer the most challenged school districts a path to join
18 the State and lead the nation to reduce greenhouse gas
19 emissions. It would allow school districts to use awarded
20 funds to replace buses with the latest in alternative fuel
21 vehicles.

22 Thank you.

23 CHAIR NICHOLS: Thanks.

24 MR. REA: Good morning, Chair Nichols, Honorable
25 members of the Board. My name is Mike Rea. I'm a

1 director of school transportation a joint powers agreement
2 serving 17 school districts in Sonoma County. I'm also
3 the government relations chairperson for the California
4 Association of School Transportation Officials, as well as
5 the co-chair of the School Transportation Coalition.

6 By our estimate, there are over 3,500 school
7 buses in California that still qualify under the lower
8 emission school bus program. Many of those school
9 districts, however, are in small air districts and rural
10 areas of the State that don't have access to funds that
11 larger air districts may have.

12 These older buses are less safe and more
13 polluting and potentially could harm the health of
14 students and youth that ride the bus. We appreciate
15 Senator Mike McGuire's work on this. We also appreciate
16 and support the Air Resources Board's proposed \$10 million
17 for rural school bus replacement pilot program and we also
18 appreciate the staff work on the details of this program.

19 Thank you very much.

20 CHAIR NICHOLS: Thank you. Thirty-five hundred
21 is still quite a lot of buses out there in need of being
22 replaced. I thought we were doing better than that.
23 We've had a goal for quite some time now of getting down
24 to zero of those buses.

25 Any comment on that, staff?

1 MOBILE SOURCE CONTROL DIVISION CHIEF KITOWSKI:

2 Let me start by just saying, yes, we would like
3 to go faster and wish we had more money to do that. Part
4 of this is whether you're setting a goal for the pre-'77s,
5 which was the absolute oldest and the dirtiest --

6 CHAIR NICHOLS: The worst of the worst.

7 MOBILE SOURCE CONTROL DIVISION CHIEF KITOWSKI:

8 -- and the ones that did not meet federal safety
9 standards. And those we've done an effective job of if
10 they're not all off the road -- and I'm pausing slightly,
11 but if they're not off the road, there's a handful left
12 and that's it. And then you start sort of graduating up.
13 They're a little bit cleaner and they're a little bit
14 safer, we would certainly like to make stronger efforts to
15 get those off the road as well.

16 CHAIR NICHOLS: Thanks.

17 MR. NORRIS: Good morning. My name is David
18 Norris. I'm the director of maintenance operations and
19 transportation at Lakeport Unified School District. And
20 I'm here to -- in support of the \$10 million rural school
21 bus replacement program. Lakeport is a small rural town
22 located on the west shore of lake -- Clear Lake in Lake
23 County.

24 The Lakeport Unified School District has
25 approximately 1,550 students, and we provide

1 transportation services to approximately 470 students
2 daily. Lake County has a relatively high poverty rate,
3 and about 61 percent of our students are on the free and
4 reduced program for meals.

5 Lakeport applauds the school bus replacement
6 pilot program and ARB's efforts, which will reduce
7 emissions and cause -- caused by old dirty, polluting
8 school buses, so that school children inside and outside
9 the buses won't be -- will not be exposed to both cancer
10 causing and smog pollutants.

11 We are still operating our oldest school buses,
12 which are 1987, 1990, and 1991, all between 20 and 29
13 years old. For many of our students, the yellow school
14 bus is their only option for transportation to and from
15 their education. Many families do not have cars, they
16 live out on our reservations, and they parents rely again
17 on our school buses to pick their students up.

18 Transporting 70 plus students in a clean, safe
19 bus is clearly the best choice for our students, and the
20 environment. I urge the adoption of the \$10 million rural
21 school bus replacement pilot program and look forward to
22 the legislature approving the funding for that, so that we
23 can get some nice buses on the road.

24 Thank you for your time.

25 CHAIR NICHOLS: Thanks.

1 MS. O'BRIEN: Good morning, Chair and members.
2 Rachael O'Brien with the Agricultural Council. Ag Council
3 is a member-supported organization advocating for more
4 than 15,000 farmers across the State, ranging from farmer
5 owned businesses to the best known brands in the world.

6 Ag Council is supportive of the proposed funding
7 plan for low carbon transportation and fuels investments
8 and the Air Quality Improvement Program, specifically the
9 expanded agricultural equipment trade-up pilot project in
10 the San Joaquin Valley. Targeting this investment in the
11 San Joaquin Valley aids in accelerating needed adoption of
12 cleaner diesel engine technologies in mobile ag equipment.

13 We're also supportive of the three proposals for
14 low carbon transportation allocation. They are the
15 non-freight off-road allocation for advanced technologies
16 and efficiencies for agricultural equipment, the zero
17 emission freight equipment pilot commercial deployment
18 project, and the very low carbon fuel incentive that could
19 be applied to the capture and use of biomethane from dairy
20 digesters.

21 In closing, Ag Council recognizes the importance
22 of reducing GHG emissions and criteria pollutants with
23 incentives. We thank staff for identifying these proposed
24 funding opportunities, and look forward to helping in
25 their success.

1 Thank you.

2 CHAIR NICHOLS: Thank you.

3 DR. LOVELACE: Good morning, Madam Chair and
4 members. I'm Ed Lovelace from XL Hybrids. And we're a
5 connected fleet electrification company that sells
6 electrified vans and trucks nationwide with over 25
7 million customer miles at this point.

8 I want to thank the Board and staff for all of
9 their efforts over this planning year. Overall XL is very
10 supportive of ARB staff's portfolio investment strategy,
11 and consultative approach and the resulting plan before
12 the Board today.

13 We have a few comments though for potential
14 enhancements. First, we'd love to see increased
15 flexibility on the HVIP conversion product caps. Second,
16 we'd like to see increased flexibility on the HVIP voucher
17 amount adjustments, allowing staff to adjust those amounts
18 to different market conditions that occur.

19 Finally, we'd like to see higher funding
20 proportions for first-come first-served technology
21 agnostic programs, such as HVIP and such as the Low Carbon
22 Fuel Standards. One of the challenges we have with pilot
23 programs, and we're not suggesting eliminating pilot
24 funding. We understand the value and the critical
25 importance of that.

1 But one of the challenges, of course, is that the
2 funding is uncertain, and the funding takes a long time to
3 come around. And so we'd like to see more programs
4 targeted at rapid and higher volume deployment. As you've
5 heard from previous speakers, they're already showing what
6 can be done with higher volumes of deployment.

7 Thank you.

8 CHAIR NICHOLS: Thank you.

9 MS. VAZQUEZ: Good morning, Chair and Board
10 members. My name is Diana Vazquez. I'm here on behalf of
11 Sierra Club California. And specifically, we're here to
12 support the funding plan that has been already presented.
13 But once specific issue that we're here for, specifically
14 the issue of the budget constraints that have been -- has
15 been going on in this budget cycle.

16 As previous speakers mentioned, we're working
17 hard across the street to really get this money allocated
18 into the programs that you guys have been presenting. But
19 specifically, we're here to talk about the Clean Vehicle
20 Rebate Program. A lot of our members and a lot of
21 citizens across California are depending on these rebates
22 to actually purchase these vehicles. And for us, as
23 organizations and advocates, we've been advocating to
24 really have these individuals consider zero emission
25 vehicles versus conventional vehicles.

1 We're afraid that if this gap continues, these
2 individuals are going to actually not even consider these
3 vehicles, because a lot of these individuals, as you all
4 know, do depend on these rebates to actually even purchase
5 these vehicles to actually make them affordable. So I
6 really urge the Board to consider finding ways to fill in
7 the gaps, and seeing if there's even options to see if we
8 can actually help individuals who are on the wait list.

9 We don't -- we understand there's going to be
10 budgeted constraints and this is the message that we're
11 trying to advocate to the legislature and the Governor.
12 But in the mean time, if we can actually find different
13 ways we can actually provide alternatives during this --
14 during these couple months, okay? Thank you.

15 MR. MAGAVERN: Good morning. I'm Bill Magavern
16 with the Coalition for Clean Air. You have before you a
17 funding plan that is sound and was developed through a
18 lengthy public process with a lot of involvement from all
19 the interested parties, and we urge you to adopt it today.
20 But what's missing is what's actually most important to
21 any funding plan is the funding.

22 And for the second year in a row, we're here
23 without having that funding. So two things that I ask of
24 you. One is that this Board convey to the Governor that
25 this lack of funding is posing severe obstacles to the

1 plans that he has laid out, his goals on climate, on zero
2 emission vehicles, on freight, and on petroleum reduction
3 are being hindered.

4 I'll just give you one example. We got an email
5 yesterday from a couple that had just entered into a lease
6 agreement for a Nissan Leaf, because they had been told
7 that a \$2,500 rebate would be part of that deal. And they
8 actually needed that rebate to make the deal work for
9 them. And we're shocked to find out that it would not be
10 forthcoming.

11 And then secondly, if we do get into the
12 unfortunate situation that we did last year where less
13 than full funding is made available by the budget process,
14 we ask that you not cut disproportionately the equity
15 pilot programs or the heavy-duty programs, because that's
16 what happened this last year.

17 And my colleague Shrayas will be addressing the
18 light-duty equity project specifically. I wanted to say
19 on heavy duty that we have the Sustainable Freight Action
20 Plan due to come out next month. And that plan will
21 require, and you'll hear this from us, you'll hear it from
22 industry, from local governments will require a lot of
23 incentive funding, in fact, more than is available in this
24 plan.

25 But having what's in this plan will be a good

1 start. And to not have it will pose a severe problem to
2 our efforts to clean up trucks, buses, and other freight
3 equipment, which as you know, the diesel exhaust from
4 those engines falls quite disproportionately on low income
5 communities of color. So we need to make sure that we
6 send as much money as possible into those programs that
7 are helping our most disadvantaged communities.

8 And finally, a couple words on fuels. We support
9 the staff proposal that for the low NOx engines, we have
10 100 percent renewable fuel requirement, and we support
11 having in the fuels incentive program, a disadvantaged
12 community benefit component to that. And we believe that
13 the benefit to the disadvantaged communities comes when
14 that cleaner fuel is burned in that community, because it
15 will provide an air quality benefit compared to burning
16 the diesel.

17 Thank you.

18 MR. JATKAR: Hi. Good morning, Chair Nichols and
19 members of the Board. Shrayas Jatkar with Coalition for
20 Clean Air.

21 I first want to thank staff for the great public
22 process of the work groups and the workshops held earlier
23 this year. We look forward to continuing that dialogue
24 once the funding plan is hopefully approved and once
25 funding is actually appropriated for these important

1 projects.

2 And on that note, I'll just comment that when it
3 comes to the light-duty projects, what we saw last year
4 was funding appropriated to the Clean Vehicle Rebate
5 Project, but -- and for the Enhanced Fleet Modernization
6 Program the Plus-Up component, which retires some of the
7 older highly polluting vehicles and helps folks get into a
8 cleaner electric vehicle.

9 So while CVRP and EFMP were -- the Plus-Up were
10 funded last year at lower levels than we anticipated, many
11 of the other -- really, all of the other equity pilot
12 projects went unfunded. These are projects that provide
13 significant benefits to disadvantaged communities, to low
14 and moderate income consumers. And so we encourage that
15 in those conversations that you may be having with
16 legislators and with the Governor's office to really
17 underscore the importance of all of the different
18 projects, and not just prioritize or single-out some of
19 the vehicle and voucher rebate type programs, but the
20 grant funded ones are very important as well.

21 Also, in terms of funding, I want to just
22 encourage some action that may be already in the works,
23 but if it's not just to encourage an expediting of a
24 couple of activities in terms of funding. One is now that
25 the fourth quarter auction has happened to make sure that

1 the remaining funds for Plus-Up are spent, and also to
2 begin spending -- or authorize local air districts to
3 begin spending base EFMP funding that is available now.

4 And also in terms of funding, if there is an
5 early release from the legislature of funds for the Clean
6 Vehicle Rebate Project, we encourage that those funds do
7 go to low and moderate income consumers first who are
8 already in the backlog.

9 I wanted to make a couple comments on the Clean
10 Vehicle Rebate Project and Plus-Up. And these are
11 explained more fully in our letter that we submitted
12 earlier this week. But when it comes to CVRP, we do
13 support the recommendation to begin looking at transition
14 to a point of sale rebate model with prequalification. We
15 think this will increase the accessibility for low and
16 moderate income consumers, and encourage prequalification
17 as well to make sure that we're addressing any free
18 ridership concerns.

19 One point is that we do encourage a look at
20 lowering the income cap. While it is -- has been in place
21 for a few months and we're supportive of that, we do
22 believe that it should be considered to go lower,
23 especially if the appropriation is much less than we
24 anticipate, and also looking at data based on the last
25 three months of having an income cap in place.

1 And lastly on Plus-Up, we do support the
2 expansion to newly participating air districts and
3 appreciate the staff's flexibility and funding approach.

4 Thanks.

5 CHAIR NICHOLS: Thank you.

6 MS. HOLMES-GEN: Chairman Nichols and members,
7 Bonnie Holmes-Gen with the American Lung Association in
8 California. And I'm pleased to be here to share the
9 support of the American Lung Association in California for
10 this investment plan for low carbon transportation fuels
11 and AQIP, and say that we believe it provides a good
12 balance of investments to meet our air quality, our
13 petroleum reduction, and our climate goals, and, of
14 course, we also support the allocation of funding to
15 actually get these -- this funding out on the ground and
16 get these projects working to promote -- to provide the
17 air quality benefits that we so strongly need.

18 The American Lung Association has been working
19 hard to try to promote the allocation of these funds and
20 we look forward to working with you. We need to get them
21 out this year. We don't need to have more delay.

22 We are strongly supportive of the underlying
23 premise in this funding plan and the freight plan to move
24 quickly to zero emission options, and to increasing the
25 availability of those options in the light- and heavy-duty

1 sector. We think this is critical to our air quality
2 goals and to reducing lung and cardiac illnesses that are
3 linked to the pollution that we're facing.

4 As you've heard from technology developers, this
5 funding that you're approving today, the funding plan, is
6 critical to keeping California in a leadership role and
7 it's very heartening to hear the array of funding
8 technology -- of technology developers up here talking
9 about the zero emission buses and zero emission options
10 that are being produced and that are moving forward
11 because of these incentive funds.

12 I wanted to make a few quick comments that we are
13 supporting the updates to the CVRP, including the
14 additional outreach and education component. That's an
15 important piece and the point of sale mechanism. We
16 support the equity package in the light-duty sector, and
17 the expansion of EFMP Plus-Up, and, of course, the funds
18 for the zero emission bus and freight demonstration
19 deployment projects.

20 And I just wanted to note that we really
21 appreciate that where the funding plan does allow for near
22 zero, such as the low NOx trucks that you have indicated
23 that there will be a renewable fuels requirement. And we
24 think that's really important to make sure the funding is
25 focused on the cleanest, most sustainable options.

1 You've heard about other -- many other elements
2 that we do support. There's always room for improvement.
3 We continue to work with you on those areas, but bottom
4 line is we need to work together to get these funds out
5 and to publicize the great projects that are being funded
6 through this effort that are bringing real benefits in
7 communities. And we'd like to work on that aspect too.

8 Thank you.

9 MS. TUTT: Madam Chair, Members of the Board,
10 Eileen Tutt with the California Electric Transportation
11 Coalition. I'm here today representing a much broader
12 coalition. If they all signed up to testify, your list
13 would be twice as long, so how many points do I get?

14 (Laughter.)

15 CHAIR NICHOLS: Thank you.

16 MS. TUTT: I first want to say really a
17 resounding thank you to the staff and to the Board for
18 acting so responsibly and recognizing the importance of
19 these incentive programs, and working so diligently with
20 us to find -- you know, to support the plan that you have
21 today, which we fully support. I mean, we've had to
22 negotiate certain things, but we really appreciate staff's
23 what they've done with really what is not enough money.
24 Five hundred million is not enough money, but we will
25 continue to work with the legislature and the Governor as

1 the whole -- as a whole large coalition and with Charge
2 Ahead to get this money allocated to you.

3 We have full confidence that it will happen, and
4 what we're hoping for is that we'll get a three-year
5 appropriation, so that we don't have to go through this
6 again next year. But anyway, thanks again, especially to
7 staff and to the Board.

8 CHAIR NICHOLS: Thank you.

9 MS. MCGHEE: Good morning. My name is Lisa, and
10 I'm with the San Diego Airport Parking Company. I also
11 want to say thank you very much to the work that the
12 policy makers have done to support clean transportation.
13 I actually am an early adopter. I have taken advantage of
14 the ZEV HVIP. I purchased three medium-duty electric
15 vehicle buses and could not have done it without the HVIP
16 and would not have done it without the HVIP.

17 I expressed my appreciation for that, and the
18 continuance of this plan and in support of it. I, too,
19 believe that this \$500 million is not enough to support
20 the goals that we want to achieve for clean
21 transportation. The expense of the vehicles are 100
22 percent more expensive. And I also want to add to the
23 fact of the HVIP funding, I continue to support.

24 I also address concerns as it relates to
25 infrastructure. We have got to learn a lot about

1 light-duty infrastructure. But as you move into the
2 fleets, we're talking about a medium-duty vehicle to
3 heavy-duty vehicles, the type of battery and charging is a
4 much different complex experience. It's extremely
5 expensive.

6 One year ago I did not know what a kilowatt was
7 compared to a kilowatt hour. I know about three-phase
8 wiring, single-phase wiring.

9 (Laughter.)

10 MS. MCGHEE: And all of it's become necessary
11 because of the costs associated with infrastructure for
12 ZEVs. Essentially speaking, once you buy a ZEV, you've
13 got to own only infrastructure. And it becomes another
14 big obstacle that is super challenging. And I express, as
15 we move into multiple dwellings, apartment complexes,
16 workplaces, it's all going to come down to the same
17 experience that I'm having with infrastructure. And it's
18 not only just the cost of investing in the infrastructure,
19 installing the infrastructure, but also rate costs.

20 And I would like to see the program focus a
21 little bit more on what fleets can do to bring lessons
22 learned to the forefront. And there is advanced
23 technology and infrastructure that includes other types of
24 infrastructure beyond grid-tied that is at zero cost for
25 utility bill or zero cost for a kilowatt. We can drive

1 off our sunshine.

2 And there's also fast charging that becomes
3 somewhat necessary for fleet operators, because of the
4 vehicle miles traveled. The range of electric vehicles is
5 very short. You know, we used to have 300 miles in our
6 vehicles, now we're getting 100 miles. So trying to
7 fuel-up with the element of time is critical.

8 Imagine this, you know, it's going to take you
9 three -- to go to Las Vegas it's going to be five and a
10 half hour drive in a convectional fueled vehicle. Now, if
11 you go in a level 2 charging electric vehicle, it's going
12 to take you 12½ hours. And so my point is there's a lot
13 of lessons to be learned when we're talking about vehicle
14 miles traveled with a range of a vehicle that's a third.
15 And infrastructure is one of the ways that we need to
16 focus on learning. So thank you.

17 CHAIR NICHOLS: Thank you.

18 MR. EDGAR: Madam Chair, Board members. My name
19 is Evan Edgar from the Compost Coalition. We make RNG.
20 We're making carbon neg fuel today. I'm here on behalf of
21 the Clean Fleets Coalition. We use RNG. We got our
22 fleets off diesel. We're CNG trucks, so we're actually
23 making RNG. I'm here today to talk about we're at the
24 intersection of re-thinking methane.

25 Next week, there's a good conference on it. But

1 we're here to support the short-lived climate pollutants.
2 Right now, all that methane comes out of the landfill it's
3 30 years with all of the organics. What the short-lived
4 climate pollutants does, it gets organics out of the
5 landfill by 2025. We can make RNG in 30 days, and put it
6 back in our trucks, not 30 years and have it leak out of a
7 landfill.

8 So on behalf of the California Compost Coalition,
9 we are supporting the Low Carbon Fuel Standard program at
10 40 million. It's a great program. We're making fuel
11 today in Sacramento at Atlas Disposal. We're making fuel
12 down at SFO at Blue Line Transfer Station. We have many
13 more plans in the future, and we compliment CalRecycle and
14 the California Energy Commission. And this RNG fund is
15 great.

16 On behalf of the Clean Fleets Coalition, we have
17 transitioned off of a diesel fleet. We have a CNG fleet.
18 And with low NOx engines, we are set to purchase a lot of
19 trucks. The garbage industry is about 15,000 fleets. We
20 have about 3,000 on CNG, and we want to get off of diesel
21 by 2025. We want to get off of landfills by 2025. And
22 this plan today gets us there.

23 So I want to thank staff. They've been listening
24 to us. We've been to a lot of meetings with Julia, from
25 Bioenergy Association of California, in order to support

1 the funding of this Low Carbon Fuel Standard, as well as
2 to increase the funding for trucks. Eighteen thousand
3 gets us there, but going up to 25 would be great.

4 So on behalf of the Clean Fleets and Compost
5 Coalition, we're at the intersection of making it happen
6 now, immediately. We have the technology, and now we have
7 the funding.

8 Thank you.

9 CHAIR NICHOLS: Thank you.

10 MR. WHEATLEY: Madam Chair, Board members, thank
11 you very much for the work that you've put into this plan,
12 and also for giving me the opportunity to speak here
13 today.

14 My name is Desmond Wheatley, and I'm the
15 President and CEO of Envision Solar, a San Diego based
16 technology innovation company, which amongst other things,
17 invents and manufactures here in California solar powered
18 electric vehicle charging stations. We hire a fantastic
19 team of combat veterans, disabled workers, and others
20 right there in San Diego manufacturing products, which
21 allow Californians, and Americans, and now even people
22 overseas to drive on sunshine.

23 We support any efforts to fund low carbon fuel
24 vehicles. But particularly, where infrastructure is
25 concerned, we and our other colleagues in the industry who

1 are deploying electric vehicle charging infrastructure
2 have invested heavily in this space. We've deployed
3 thousands of EV chargers, but nowhere near enough. We're
4 going to need about 100,000 EV chargers a year to meet
5 Governor Brown's excellent goals of 1.5 million vehicles
6 on the road by 2025. And we're not going to get it Done
7 alone, so we need your help.

8 I particularly want to emphasize the idea of
9 using renewable energy, not as a last-ditch solution when
10 we can't make the 100-year old grid work to support this.
11 I think we should be looking at renewable energy as the
12 first and best solution for charging electric vehicles.
13 We know works. We have excellent customers like Caltrans,
14 New York City, many others all over the world who are
15 driving on sunshine because of our products. It
16 definitely works. There's no question about that anymore.
17 We just need to emphasize it as the first option, not the
18 last option.

19 Winston Churchill once said that Americans always
20 do the right thing, but not until they've exhausted all
21 the other possibilities.

22 (Laughter.)

23 MR. WHEATLEY: Let's not prove him right where
24 this infrastructure is concerned.

25 It's right to drive on sunshine. It's good for

1 the environment. It's good for the economy. It's good
2 for our employees. It's good particularly low income
3 people too. Remember, solar power, once you've paid for
4 the infrastructure, is free. That's the best way to get
5 low income people driving around and being productive in
6 electric vehicles.

7 There's really nothing wrong with it, and we need
8 your support. So please, as we look at funding in the
9 future, let's put renewable energy first, not last, and
10 let's incent it and encourage it.

11 Thank you for your time.

12 CHAIR NICHOLS: Thanks. We have one other person
13 who filed a card, I guess, after the list was finished
14 Thomas Lawson. I was handed this blue card for Thomas
15 Lawson.

16 Going once.

17 Going twice.

18 Okay. Then I think we've finished the list. And
19 it's time for Board questions or discussion. I'll just
20 identify the items that I think -- I know we need to talk
21 at least about the -- where we're headed in terms of
22 responding to the local districts, at least some of the
23 district's desires for a stronger role in administering
24 the program and how you intend to approach that.

25 I was also struck by the point that we may not

1 have applied a filter or a lens to looking at this plan
2 that relates to the short-lived climate pollutant strategy
3 that this Board has embraced and is responsible for moving
4 forward on. It's not something that is referenced
5 particularly. I think there's very strong rational. And
6 I should have started by saying that I recognize that this
7 is a very difficult delicate task both to maintain support
8 and momentum in programs that have already been started
9 and launched, as well as moving into other areas where we
10 need more emphasis, never with enough money to do
11 everything that we want to do.

12 And so I do want to acknowledge and respect the
13 work, not only of the staff, but also of all the
14 stakeholders who contributed and really were willing to
15 accept the fact there was a balance and that no one was to
16 going to get everything that they might have wanted.

17 But having said all of that, I do wonder if we're
18 doing everything we can to move as fast as we can to get
19 rid of short-lived climate pollutants through this effort.
20 And so I'd like to at least ask staff to think about and
21 address that question. But I think other Board members
22 have issues that they might like to raise as well.

23 So why don't I start down at the far end of the
24 table here and just recognize anybody who wants to speak
25 at this point.

1 BOARD MEMBER TAKVORIAN: Thank you, Chair
2 Nichols. Thank you to everyone who was here today to
3 testify. I learned a lot. I really appreciate everyone's
4 involvement today as well as your involvement throughout
5 this long process, and I want to commend the staff for a
6 really good public process that includes multi-pronged
7 agencies, as well as a really complex program that relates
8 to a lot of different agencies as well as a lot of
9 different regulations.

10 I appreciated the multiple public comments on the
11 need for more support for new buses and bus conversion. I
12 wanted to echo Chair Nichols' statement. I, frankly, was
13 shocked that there are still so many dirty buses out
14 there. And I had a question of how many are there? I
15 wasn't quite clear on the response. Is it 3,500 in the
16 State? So I wanted to get a thought about that.

17 Frankly, I don't see why this isn't our highest
18 priority. And I'd like to know how much it costs to
19 replace all of the school buses? I mean, these are our
20 kids that are riding on buses that -- where they're
21 getting direct exposure to particulate pollution. I would
22 challenge anyone to tell me what's a higher priority than
23 that from a public health perspective, for all of the
24 goals of the agency. I have to say I don't know what I'm
25 missing.

1 But I also feel that disadvantaged community --
2 children that are in disadvantaged communities they are,
3 as you all well know, exposed to multiple pollutants.
4 There's lead in their homes. There's excessive air
5 pollution in their communities. So they are getting
6 double, triple exposures. And that's just not acceptable.

7 So here's an opportunity, and frankly in this
8 funding plan \$10 million doesn't seem like enough, even
9 with a lowered funding allocation. So I'd like to ask us
10 to take a look at that. And perhaps we have a chance -- I
11 don't know if there's a silver lining to the budget not
12 having gone forward yet, but maybe this is one of them.
13 So that's one thing.

14 The other is that I'd like to ask, and I talked
15 about this a little bit with staff, but I do think that
16 there needs to be incentives for the resale of ZEV
17 passenger cars. And I -- frankly, I just don't think that
18 financing is good enough, especially for low, low income
19 folks. I think that it is important to get those
20 vehicles. I really appreciate the incentive programs. I
21 think they've been highly effective. We need to then
22 continue those into our low income communities, and I
23 think that's a way to do it.

24 I also appreciated the statements from -- in
25 regards to the bicycle incentive pilot program and

1 especially focusing on low income communities. I mean,
2 what's a bigger bang than that. And just even buying the
3 bikes, never mind the incentive, is a much lower cost than
4 it is for incentives for the passenger cars. And the
5 vehicle miles traveled reductions are enormous, and I know
6 what kinds of bikes folks are driving -- or riding in our
7 communities, and they definitely need to be replaced.

8 So I think that's something we should really take
9 a look at. Lastly, I'll just say if the full allocation
10 is not provided in the budget this year, I want to really
11 stress, which I think many have done, that the reductions
12 not come from those programs that benefit disadvantaged
13 communities.

14 Thanks.

15 BOARD MEMBER DE LA TORRE: Just two things. One,
16 I am very interested in the jet fuel issue. I was there
17 when the first airplane took off from LAX with the
18 alternative fuel, the biofuel. And the work that's been
19 done in Paramount to convert that refinery I think really
20 moves things in the direction we've all been talking
21 about. And again, interestingly, the U.S. military are
22 the ones who have pushed this technology and have
23 developed it over time to make it commercial is -- I
24 think, should be one of our priorities here.

25 The second is on CVRP. And I had a conversation

1 with staff about this. Going forward, and I've said it
2 before, but I'm going to say it every time it comes up, we
3 need to have a plan ahead of time for a graduation for
4 these vehicles by vehicle type, where we set a marker of
5 what is the number at which a vehicle is -- has graduated
6 does not need support from CVRP? And the time to do it is
7 now before we have a vehicle out there that's selling so
8 well that we have a discussion with that vehicle in mind.

9 Right now, we don't have -- we're not anywhere
10 near there, so now is the time to set a marker where we
11 say -- I'm just throwing a number out there -- you know,
12 100,000 units in a year, or over a couple of years. That
13 vehicle is selling very well. It doesn't need our help
14 anymore. That's one.

15 And two, I was over in the legislature a few
16 weeks ago, and someone raised the possibility of using the
17 rebate from CVRP or the sticker for HOV, not both. And I
18 think that is something that we need to start considering,
19 because there is absolute value in that sticker. And so
20 again, because these dollar amounts are getting so big,
21 maybe it's time to have a conversation among ourselves
22 about one or the other, not both. Thank you.

23 CHAIR NICHOLS: Next. Go ahead. I was just
24 assuming we would go in order here.

25 BOARD MEMBER ROBERTS: Thank you, Madam --

1 CHAIR NICHOLS: You don't have to speak if you
2 don't want to.

3 BOARD MEMBER ROBERTS: I'll be brief. I like the
4 biojet fuel.

5 CHAIR NICHOLS: Yeah, that's a good one too.

6 BOARD MEMBER ROBERTS: I like a program that is
7 changing over the school buses, and I very much like a
8 program that's putting some emphasis on hydrogen. I think
9 the conversation that we heard late in the testimony about
10 the rental car agency and the electric buses and all of a
11 sudden discover that there's more to it than just buying a
12 few buses, and the limitation on those buses is kind of
13 what I've been suggesting for a long time as we've talked
14 about the public transit agencies. The electric buses are
15 kind of a niche, and probably work well in some instances.

16 But if you have to run -- if you're in an
17 environment where you have to run a bus for 300 miles, and
18 even more than that as we do in some of the larger transit
19 agencies, where the bus stays out all day and we just
20 replace the driver periodically, we need a driver maybe
21 that can go on for as long as the bus does. But both of
22 them go well beyond the range of any electric vehicle.

23 And I think that's going to be the issue, so I --
24 but I like what I'm seeing and developing in the hydrogen.
25 And I think it gives us another alternative that may have

1 a much larger role to play than currently.

2 So with that, I think the program -- the only
3 question remains what's going to be there.

4 CHAIR NICHOLS: Great. Okay.

5 BOARD MEMBER SHERRIFFS: Thank you. A couple of
6 comments, and I do have three questions. But I'll start
7 by saying I'm all in favor of moving{moo-ving} forward on
8 the jet fuel thing, straight from the dairy.

9 (Laughter.)

10 BOARD MEMBER SHERRIFFS: Yeah, I really
11 appreciate, boy, the energy in terms of the testimony, and
12 thank the people from the San Joaquin Valley who came and
13 testified, cities, industry, the Ag Council, lots of
14 important -- we're talking low carbon fuel, but this
15 clearly is so important the co-benefit in terms of air
16 quality issues and helping what we're struggling with in
17 the valley.

18 You know, thanks to Porterville, Visalia for your
19 testimony And your leadership. The AC Transit and Sunline
20 for being such pioneers in really proving these
21 methodologies, and also reminding us, which I think is
22 really important, because over and over, this is not
23 enough money. But one of the lessons that we hear from AC
24 and Sunline is, yes, but these small steps are very
25 important. In fact, they lead to everybody being able to

1 take the bigger step.

2 I mean, it's really phenomenal that you hear 1.3
3 million capital investment for a bus. But as it scales up
4 we're talking \$300,000, and also hearing that people
5 aren't afraid of the competition. They say great. That's
6 what we need. We need the scale that let's us do it less
7 expensively too.

8 The ag community talking particularly about
9 methane and, has been mentioned, we really need to think
10 much more about short-lived climate pollutants and how
11 they fit in this plan, and how to get the most out of this
12 plan to help with. And methane is clearly a big one and
13 key for the valley.

14 As the owner of a battery electric car, yes, I
15 wonder about shouldn't we give -- how we are going to get
16 this in to people with less means? And -- but I'm also
17 reminded, boy, the dealers -- so I keep getting messages,
18 don't you want to sell your all-battery car? But what are
19 all the emails asking me to buy?

20 Nobody has said are you happy with your battery
21 car? Do you want another battery car? They're, oh,
22 we've got this great sports car. We've got this other
23 car. Hey, wait a minute guys, let's continue to promote
24 it. So there is a real disconnect, but I think we do need
25 to rethink are we going is support people buying those

1 used cars, because otherwise how are we going to get them
2 into the communities and broaden the investment the
3 involvement.

4 A recurrent theme has been, and I think staff
5 asked -- answered a little bit, well, we hope we get the
6 full amount, which is not enough. But what happens if we
7 got a quarter, or a half, or the legislature releases
8 three-quarters? How are we going to now rescale this?

9 And clearly, we want to do it quickly, because
10 it's been emphasized over and over. Fleets are turning
11 over as we're struggling with this. And every time we
12 delay, it's another vehicle we want to get off the road
13 that we going to have to deal with later.

14 And one particular question in terms of low
15 carbon fuels, how soon might these biofuel investments
16 impact the big problem we're facing in the valley in terms
17 of biomass -- ag biomass, and the fact that we're losing
18 the facilities that can process biomass? How soon might
19 biofuel facilities help deal with that problem?

20 CHAIR NICHOLS: Okay. I see staff are taking
21 notes. I think they're going to try to respond.

22 BOARD MEMBER SHERRIFFS: I'm always encouraged
23 when staff are taking notes.

24 (Laughter.)

25 CHAIR NICHOLS: I think they're going to respond

1 at the end to all the questions.

2 Go ahead.

3 VICE CHAIR BERG: Thank you very much.

4 I agree with several of my fellow Board members
5 and the items that they have brought up of concern and so
6 I'm not going to repeat those.

7 I also was in agreement with the Chair, that
8 looking at our CAPCOA partners, specifically how to
9 coordinate these various incentive programs to simplify on
10 behalf of the stakeholders. We've heard that time and
11 time again you guys have done a great job over the years,
12 but to be able to go back and take a look if we get funded
13 this \$500 million, I think, would be very well worth it.

14 I also, and might jump in here before Chair
15 Nichols, but following up on Diane's -- on the school bus,
16 maybe we could look at -- well not maybe. We definitely
17 need to look at what the inventory is, what is the
18 criteria, what's a definition of old now? And let's put a
19 concerted effort to try to figure this out. Because 10
20 years later after Prop 1B, and as several others, and as
21 we've looked at truck and bus rules and various things and
22 we've heard maybe we could figure out how to resolve this
23 school bus problem, once and for all. And then finally, I
24 think I'd be remiss if I just didn't express how important
25 it is that we get this funded.

1 I just -- in thinking about Plan B, it's so
2 painful. It is so painful that we have a wait list again
3 on CVRP. We have fabulous programs that we're looking at
4 for the disadvantaged communities to bring these really
5 great technologies forward. We're being tasked with doing
6 that. We have a -- no question, a goal that we've got to
7 hit. We have got to have this funding.

8 And so, however, I think I can say on behalf of
9 my fellow Board members, however we can help, however we
10 can educate, whatever you would like us to do, we're here
11 to help.

12 Thank you.

13 CHAIR NICHOLS: Okay. Let just keep going.

14 BOARD MEMBER RIORDAN: Thank you. Let me just
15 share that we do have to work very hard to, you know,
16 infuse the enthusiasm that's in this audience and the
17 support. I didn't know of a time when I've seen all of
18 the support positions, and their are absolutely zero
19 opposition positions. And I honestly think those who were
20 neutral were really supportive.

21 (Laughter.)

22 BOARD MEMBER RIORDAN: So may I say -- may I say
23 that you need to take that enthusiasm and that support to
24 share with those who are representing you in the
25 legislature, and really bring it home to your particular

1 issue, whether it is a school bus, or whether it is a
2 light-duty vehicle, or whether it is a vehicle that
3 somebody might drive, and don't forget to say how many
4 times there are jobs created in their district by some of
5 these various efforts, and that's a very important thing,
6 particularly in areas that need to have more jobs.

7 If we could somehow harness all of this
8 enthusiasm in this excellent report that staff put
9 together, I think we will all be very successful. So this
10 just moved from here to there across the street.

11 (Laughter.)

12 BOARD MEMBER RIORDAN: And I'm hoping we can get
13 this funded. Thank you.

14 BOARD MEMBER MITCHELL: Thank you. And those are
15 really wise words, Barbara, because we -- I want to thank
16 staff for a really excellent plan here. You've covered
17 everything very well. And I can't imagine a better job
18 than what you've done.

19 A couple of issues came up in the comments. And
20 I will just address those. First of all, I want to say
21 that I'm delighted to see the airline industry coming
22 forward in supporting a low carbon fuel for our jets that
23 are out there. This is an important move forward.

24 But the other issue that I want to touch on is
25 the one that was raised about the administration of the

1 program in the local air districts, and in connection with
2 that, some comments made about the \$18,000 incentive for
3 low NOx trucks, and our staff's response on that, which
4 was, well, you can combine that with the other programs.

5 So that really was what leads to the problem with
6 administering these funds and making sure that if you're
7 going to apply for, say, Carl Moyer, that can you then
8 accompany that with another application for some other
9 funding source, and the administrative burden that that
10 might produce, how do we do? And I just think, you know,
11 that's an issue that we need to take a look at.

12 Also, the comment was raised is 18,000 enough?
13 And one commenter suggested it should be 25,000 My own
14 thoughts on this are that I would rather increase the
15 incentive funding, so you get some trucks out there,
16 rather than to have it too low, and it doesn't get done.
17 So you could have fewer trucks in that low NOx category,
18 but at least you have some out there and you begin the
19 transition into that -- into that new technology.

20 So that's just kind of my opinion here, but take
21 it however you'd like, and -- but I think you need to have
22 a look at is 18,000 really enough. And how do we -- if
23 we're going to use that, how do we coordinate it with
24 other programs?

25 Thank you.

1 BOARD MEMBER EISENHUT: Thank you, Chair Nichols.

2 First, I want to add my compliments to the staff.

3 This is an incredibly balanced and well crafted

4 presentation that deserves our support and enthusiastic

5 support. I'll add my voice to the comments about biojet

6 fuel as an endorsement of that possibility. And just

7 comment, in no particular order, with regard to the very

8 low carbon fuel subsidy, I think I just want to

9 acknowledge is, I understand it, and you can correct me if

10 I'm wrong, that that has implications for the dairy

11 industry's conversion to biofuels and the production of

12 transportation fuels coming from dairy digesters.

13 So I assume that those -- that activity and the

14 reduction of -- would be captured in that program. So I

15 just want to affirm that.

16 AIR POLLUTION SPECIALIST PANSON: (Nods head.)

17 BOARD MEMBER EISENHUT: And what I didn't see,

18 and I'm not convinced this is the place to have it, but I

19 want to make sure we stay on track, there are a decreasing

20 number of biomass facilities in the valley. There are

21 increasing quantities, as was pointed out by our

22 testimony, increasing quantities of dead and dying trees

23 in the Sierra's that are going to pose an incredible

24 hazard. And I think one way to partially remediate that

25 would be in those biomass plants. And I just want to make

1 sure we don't lose our attention to that detail.

2 And finally, acknowledging Dr. Sherriff's
3 comments about the San Joaquin Valley and the testimony.
4 There is a lot here encapsulated in this proposal to the
5 benefit of environmental justice communities, and the ag
6 community, and the San Joaquin Valley in total, and I'm
7 frankly and we heard from communities, from transit
8 districts, from constituents. I'm frankly disappointed
9 that we didn't hear from the San Joaquin Valley Air
10 Pollution Control District. We heard from other air
11 pollution control districts, not San Joaquin Valley. And
12 I just want to make that statement.

13 So that's all. Thank you.

14 BOARD MEMBER FLOREZ: Thank you.

15 CHAIR NICHOLS: Maybe Mr. Eisenhut will lend you
16 his. His was working fine.

17 Could we -- someone is coming up to take a look
18 at it.

19 BOARD MEMBER FLOREZ: All right. Let me scoot
20 over near John for a minute.

21 Madam Chair, I'd like to first say thank you to
22 the staff. Very, very good briefing we had earlier this
23 week on the actual plan itself. I would like to ask about
24 five process and timing questions if I could to staff, and
25 then I'd like to make some general comments.

1 First, you know, on the process, I guess the
2 first question I would have is, and I'll probably get --
3 my comment will probably explain this. But in terms of
4 absorbing additional dollars, is the plan made to do that
5 in terms of sequence, meaning folks that had applied, in
6 some sense, been oversubscribed in certain programs? Is
7 the budget made, in some sense, to seamlessly add
8 additional projects if, in deed, the amount coming from
9 the Governor and the legislature is above 500 million?

10 AIR POLLUTION SPECIALIST PANSON: Yes. The plan
11 does include contingency provisions in the event that we
12 get both more money or less money. And we have a tiered
13 approach, if we get more money. We would -- we've laid
14 out an approach where for up to \$50 million additional
15 above 500 million, we propose to go into the heavily
16 oversubscribed bus part of the truck and bus pilot
17 solicitation, as well as the also heavily oversubscribed
18 rural -- not rural, multi-source demonstration project.
19 Basically, two projects where we had big solicitations.
20 There's good projects ready to fund.

21 If we go above \$50 million, we don't want to just
22 scale up heavy duty. At that point -- we recognize that
23 we want to preferentially give additional money to Heavy
24 duty, because I think you've heard that's been kind of
25 relatively underserved -- funded in recent years.

1 So any amount above \$50 million, three-quarters
2 would go to heavy duty, one quarter would go to the light
3 duty equity projects, not CVRP, because we think our
4 allocation for CVRP meets the demand for the year. And at
5 that -- the 75 percent that would continued to go to heavy
6 duty, it would go to those -- continuing to fill those
7 oversubscribed solicitations until we run out of -- until
8 we've funded all the good projects. And then at that
9 point, we'd fund any additional project that has demand.

10 The 25 percent that would go to the light-duty
11 equity projects would be -- we'd look and see where is the
12 demand, where are we oversubscribed, and that's where we'd
13 preferentially put the money.

14 So, yes, we do have a plan in place, and perhaps
15 that was a slightly long-winded answer.

16 BOARD MEMBER FLOREZ: No, actually, that's fine.
17 That's perfect

18 (Laughter.)

19 BOARD MEMBER FLOREZ: Let me ask you, the inverse
20 maybe not as long in terms of --

21 (Laughter.)

22 AIR POLLUTION SPECIALIST PANSON: Sorry.

23 BOARD MEMBER FLOREZ: -- if, indeed, what comes
24 from across the way, the legislature and the Governor, is
25 let's say 50 percent less than the \$500 million, what's

1 that process look like? Is that captured as well?

2 AIR POLLUTION SPECIALIST PANSON: So what we've
3 done in the plan is we say if we get anything less than
4 \$500 million, we would just scale everything equally
5 across the Board. If we got 90 percent of the allocation
6 we'd fund every project. They would just get 90 percent
7 of the money.

8 That works for a 10 percent reduction, a 20
9 percent, maybe 25. Beyond that, some projects just aren't
10 viable. And so if the number -- we hope it's not so low
11 that we'd need to go to our second contingency. And the
12 second contingency is that we would come back to the Board
13 if the number is significantly different than 500. And we
14 would ask you for direction, or we'd make a proposal for
15 how we would reallocate that that.

16 BOARD MEMBER FLOREZ: Right.

17 AIR POLLUTION SPECIALIST PANSON: So we do have
18 both ends covered.

19 BOARD MEMBER FLOREZ: So that leads me to just a
20 question in terms of if it is significantly lower, and I'm
21 just wondering what that number looks like? I wasn't here
22 for the first round where we had a \$500 million budget,
23 and then I believe we were allocated 20 percent, or
24 something of that sort, you know. And so did that process
25 mean that -- came back to the Board, the Board then

1 reprioritized?

2 AIR POLLUTION SPECIALIST PANSON: Yes.

3 BOARD MEMBER FLOREZ: Okay.

4 EXECUTIVE OFFICER COREY: Senator, I'm going to
5 take this.

6 If I recall, last fiscal year, I think the budget
7 was the AQIP plan. I think it was a \$350 million plan.
8 And the appropriation that ended up playing out was a \$90
9 million appropriation. That wasn't as though all the
10 dollars in the budget were appropriated, just dollars were
11 advanced to the 16-17 fiscal year. So given the
12 significant step down in terms of the appropriation -- and
13 the appropriation was really predicated on a principle of
14 funding those programs that were up and running and
15 maintaining them. That was basically from the
16 administration of the budget.

17 We returned to the Board with a proposal in terms
18 of how to allocate that 90 million, had the discussion,
19 and that's how we proceeded. It was a critical enough
20 adjustment that really merited this -- a discussion in
21 this form.

22 BOARD MEMBER FLOREZ: And what was the time frame
23 for that? So in other words, this Board must have voted,
24 and then --

25 EXECUTIVE OFFICER COREY: It would have voted in

1 June of last year on the AQIP plan. And what I'm not
2 remembering is when that 90 million appropriation, it was
3 probably in the July or August time frame.

4 BOARD MEMBER FLOREZ: Did we miss some --

5 EXECUTIVE OFFICER COREY: And then we would have
6 returned back in September or so.

7 BOARD MEMBER FLOREZ: Richard, did we miss any
8 sort of official deadline in doing that, or was this a
9 self-imposed deadline today, meaning we have to vote on
10 this \$500 million plan?

11 EXECUTIVE OFFICER COREY: From a planning
12 standing point, from a historical fiscal year standpoint,
13 we always brought the plan to the Board in June, so we can
14 get out the gate with any solicitations and planning and
15 next steps.

16 BOARD MEMBER FLOREZ: Solicitations are driving
17 this. Okay. Let -- so let me just ask a couple more, and
18 then I want to make a couple comments. In terms of the --
19 have we ever quantified what we're not funding? So if you
20 look at -- go back to last year's plan and what wasn't
21 funded now carrying over to this year -- and I'm not
22 talking about monetary quantification. I'm talking about
23 true air pollution, climate change issues. You know, when
24 you don't fund something, and if rebates aren't going out
25 the door as planned, is there -- is there anyway you have

1 a shadow budget, if you will, that gives us some sense of
2 what is on the table, what was left on the table, what's
3 the impact, clean air impact particularly, to communities
4 that isn't just necessarily reflective of the dollars, but
5 we could actually quantify?

6 MOBILE SOURCE CONTROL DIVISION CHIEF KITOWSKI: I
7 don't believe we've done that specific analysis. We
8 actually could do that fairly straightforward. When we
9 went with the original funding plan, we assumed we were
10 going to get a certain amount of funding, and so we had
11 emission benefits associated with that.

12 When we came back, we had revised estimates based
13 on what the actually funding was. So the Delta is
14 straightforward. There are certainly opportunities there
15 that are left on the table.

16 BOARD MEMBER FLOREZ: Yeah, I'm just wondering,
17 Madam Chair, you know, that might be a good document for
18 those folks to consider moving forward, because I think
19 sometimes people just see numbers. They don't see true
20 air impacts, or greenhouse gas impacts, or some of the
21 programs that we're trying to -- you know, the actual
22 impacts, what we're leaving on the table.

23 So if you looked at last year when it was, you
24 know, de-funded, if you will, or not funded completely, I
25 mean, there was some air quality benefits obviously left

1 on the table. And now we carry forward a year later, and
2 it would be nice to know, per the recommendations, you
3 know, what that looked like last year, what was left on
4 the table, what it could possibly look like this year, if
5 we got a similar allocation. And I can tell you that I
6 think the folks across the street probably would be very
7 surprised how much we're actually leaving on the table
8 beyond dollars.

9 And so my last question would probably be on
10 the -- you know, we talked about the equity programs you
11 mentioned, Andrew, a minute ago that, you know, we'd take
12 a proportional cut, at some point, evenly to a point where
13 some programs wouldn't make sense. I'm worried about the
14 equity programs particularly, because those are low
15 numbers. And as you get to proportional, you get down to
16 that program, you wonder maybe we shouldn't do van pools,
17 maybe we shouldn't do ag stuff, maybe we shouldn't do
18 certain things, because under 10 million or 20 million it
19 doesn't make sense.

20 I'm just wondering if the staff would consider
21 putting a floor that as things are cut, that that stays as
22 is, and other things are cut, so that the equity programs
23 themselves remain in tact, and are not subject to a
24 proportional cut, given that those numbers are so low at
25 the very beginning.

1 And if you look at some of the ride-sharing
2 programs or things that were cut in the last budget, those
3 were the most -- those are completely gone, and some of
4 the other programs got funded. And I know there wasn't a
5 lot of money there. So maybe, you know, staff can
6 consider just keeping that as a floor, if you will.

7 So those are my questions. Thank you.

8 Let me just -- if I could, just say and ask the
9 Board to entertain something or a thought process or
10 staff. I actually think this budget should be \$750
11 million. I think \$500 million is doing what we did last
12 year. And I know that it is all contingent upon what
13 folks decide across the street. But -- you know, I guess
14 I, you know, look at it differently. I looked at last
15 year catching up, because I assume what I read is we have
16 about \$1.4 billion somewhere. And it seems as though when
17 we are asking for \$500 million, we're not going to get
18 more than \$500 million. And when we're asking for \$500
19 million this year, we're really not asking for \$500
20 million, because we didn't get last year's allocation
21 either.

22 So I think -- you know, my thought process would
23 simply be it would seem that we would ask for at least
24 half of what we didn't get last year, and be inclusive of
25 the \$500 million for this year. That is catch-up real air

1 quality benefits in my mind.

2 And I also think that -- and I'm just trying to
3 figure out the process how one might think about that.
4 But just knowing what we're trying to achieve over a
5 longer period than the budget year, the air quality
6 benefits well surpass budget years. They add up every
7 month. Those are the kinds of things that hopefully the
8 Board would continue to do.

9 I feel a little bit uncomfortable voting on this
10 at such a low number. It's almost as though I'm buying
11 into a low ballpark number, if I consider last year and
12 this year. If I look at statically, I would say the staff
13 has done an awesome job with the numbers that you were
14 given. But if you're sitting from this perspective
15 looking at last year and this year, and then moving into
16 next year, I think we're always going to set the bar at
17 500 million, and I think we're always somehow going to
18 seem to get much less than that.

19 And I get if it was funded last year, 500 sounds
20 appropriate. But last year was not 500 million, it was
21 much less. And I think staff did a good job in terms of
22 trying to change that.

23 The last thing I would simply say is it's an
24 interesting process, and thank you to staff for taking me
25 through it. I really admire the challenges that our Chair

1 has, and the staff, and Richard, and others, because we're
2 passing an investment plan, and I really appreciate that.
3 But what seems to happen on the other side of the street
4 is that they're passing a disinvestment plan. I mean, it
5 is -- we put something out, and it is like literally we
6 are disinvesting in true air quality benefits. And I
7 think that's the name of the game. And it's why everybody
8 is here, everybody see some benefit.

9 And as Diane mentioned and Sandy and others, you
10 know, the real issue for us as a Board, I think, is to set
11 the right standard for air quality, pick the right number,
12 if we have oversubscribed programs. I'm not saying break
13 the bank. But again, we are still playing catch-up from
14 last year.

15 And so my thought about if we have subscribed
16 programs that we can actually fill, school buses seem to
17 be, you know, something that make a ton of sense that
18 everybody is mentioning here. The new programs are
19 fantastic. But I really believe, at some point -- and I
20 know that there's some talk about when this is coming. If
21 we ask for 500, we are really -- my view only, really
22 asking for 250, because last year's allocation, plus this
23 year's allocation is really half of what we need to do to
24 improve the air quality.

25 So that's really my comments. I would just hope

1 that when we look at things that are oversubscribed,
2 clean-air buses, you know, the ride-share programs, it
3 could go on forever, all those are very positive programs.
4 It doesn't mean much if we don't actually get those
5 dollars out the door.

6 And I really appreciate everyone testifying
7 today, but I think the Board needs to think broader and
8 think two years. And as someone mentioned in passing,
9 kind of chuckled, to a three-year budget. That's really
10 how we should be thinking period anywhere when you look at
11 the improvements for air quality.

12 So I would just leave it at that. Thanks, Madam
13 Chair. Those are my comments.

14 CHAIR NICHOLS: Okay. Thanks.

15 Mr. Serna.

16 BOARD MEMBER SERNA: Thank you, Madam Chair.
17 Boy, that's kind of a tough act to follow.

18 (Laughter.)

19 CHAIR NICHOLS: We'll start with you the next
20 time and go the other way.

21 BOARD MEMBER SERNA: Right. Yeah. So I will
22 certainly add to what my colleagues have mentioned in
23 terms of the great work that staff has performed yet once
24 again. And I want to thank all the speakers that came to
25 testify today.

1 I don't necessarily disagree with much of what
2 Senator Florez just said. I certainly appreciate the
3 frustration. I think Mr. Magavern's comments earlier
4 about a real focus on explaining, as best we can, or
5 emphasizing, as best we can, to the administration that
6 given the introduction of his six pillars, including a
7 number of initiatives that were mentioned by a number of
8 speakers today, including short-lived climate pollutant
9 reduction, is something that I think has to be part and
10 parcel of this investment plan.

11 In other words, what I -- I guess what I didn't
12 here clearly articulated during staff's presentation is
13 how, besides just here's our list of -- priority
14 investments, how does that -- how is that going to be
15 reflective of what I believe we didn't have in advance
16 last year, which is kind of this emphasized six-pillar
17 approach that the administration has now communicated
18 pretty clearly.

19 So I'd like to hear from staff what, if any, plan
20 there is to stay nimble, and be responsive, and to
21 actually use that clearly articulated initiative by the
22 administration to underscore the fact that not only are we
23 playing catch-up, but to not receive full funding again is
24 going to do nothing to advance that last Executive Order.

25 So maybe, Mr. Corey, if you'd like to respond to

1 that, I'd like to maybe hear your thoughts.

2 CHAIR NICHOLS: Okay. I think what I need to
3 hear from you then is the response on how this fits with
4 broader strategies, including this idea of how to
5 articulate what the true need is better. I guess I do
6 have to say as a person who reports to the Secretary of
7 CalEPA, and to the Governor directly, that we aren't free
8 to move money around, even though we might wish to.

9 I wish I had had that experience of being able to
10 say I'd like to make it 750 instead of 500, but we have to
11 do that through the budget process. And so we're not in a
12 position, other than saying what we think the true need
13 is, which we absolutely can do to make it happen.

14 But we definitely can talk about what the need
15 is, and how that fits with our mandates in terms of
16 cleaning up the air and meeting our climate goals. So I
17 think that suggestion that has just been made is a very
18 helpful one.

19 I would like you to explain, if you can, we're
20 thinking about not including aviation fuel. Are you
21 thinking it's covered by the Low Carbon Fuel Standard and
22 there's money there? Is it something we could simply open
23 up as an eligible source? I think that would be -- that
24 would be something that would be much welcomed here, and
25 we could certainly fit that into the resolution.

1 Those are certainly two of the biggies. And I
2 think the other one is this issue about the flexibility
3 with respect to the limit on the -- on the low NOx natural
4 gas engines, just because I didn't hear anyone saying that
5 the idea of a program to just change out engines was
6 something that they thought was going to have a lot of
7 legs.

8 And even if the number of vehicles might not be
9 as great that we were touching, if arguably we were
10 getting more air quality bang for the buck with getting
11 people new trucks, then we should be open to doing that.
12 And then again, we wanted to hear some more about the --
13 about the role of the local air districts in implementing
14 these programs.

15 So if you want to just take those points, I don't
16 know if, Richard, you want to orchestrate this, or, Jack,
17 you want to take the lead, or how you want to do that?

18 EXECUTIVE OFFICER COREY: How about this -- I
19 think they're -- I'm going to have Jack fill it -- well,
20 I'm going to cover a few points. I want to cover the
21 connectedness question, in terms of the relationship to
22 the pillars, Supervisor Serna raised, as well as the
23 CAPCOA question. I think it's a really important one.
24 And then the alt fuels. And then Jack was keeping careful
25 notes, and I think he will -- he will bat clean-up.

1 CHAIR NICHOLS: Okay.

2 EXECUTIVE OFFICER COREY: So, Supervisor, so in
3 terms of the connectedness, in fact, I was thinking it was
4 occurring to me when I was listening to the conversation
5 about one element, which is the short-lived climate
6 pollutant plan. I think someone made the point that there
7 was there no -- not a single reference. I've not
8 validated that point. I didn't do an on-line search.

9 But the fact that the question was raised, to me,
10 underscored a point. And as I think about this plan, I --
11 and I think about the process that we went through to
12 develop it, and this is over many, many months. And
13 clearly, that's reflected in the comments and the broad
14 spectrum of stakeholders that are at this hearing, and the
15 perspective that they share, which I think is generally
16 support for the process they went through, and the
17 balance.

18 And when I talk about balance, there's a few
19 elements. If I look at these strategies, many of them are
20 short-lived climate pollutant strategies, are strategies
21 to reduce consumption of petroleum, are strategies that
22 will yield further reductions of NOx, are strategies that
23 will reduce black carbon emissions, which is not only a
24 toxic pollutant from diesel combustion, but also a strong
25 climate forcer.

1 At what occurred to me though was the need to be
2 much clearer on those linkages between these packages of
3 projects and how they link to the overall pillars and our
4 SIP that will be being brought to the Board later this
5 year, the short-lived climate pollutant plan, as well as
6 sustainable freight plan. I think there's a strong
7 linkage. In fact, I'm convinced of that.

8 But I think from a clarity standpoint, we're
9 going to have to strengthen those -- that association and
10 be clear on how those pieces fit together. That would --
11 sure.

12 BOARD MEMBER SERNA: Can I respectfully suggest
13 that if we do -- if we are forced to come back to consider
14 the first contingency, the second contingency, that
15 perhaps we have at least one slide or maybe a couple that
16 actually clearly show that a little bit more so than what
17 we saw today?

18 EXECUTIVE OFFICER COREY: Understood. No, I
19 think that's a fair request.

20 BOARD MEMBER SERNA: Thank you.

21 EXECUTIVE OFFICER COREY: The comment that -- and
22 the Chair added to this, and it -- so it's just a
23 suggestion to consider, to Senator Florez's point about we
24 need more money, we do. There's no doubt. And we will
25 be -- we are crystal clear on that need, and I think the

1 stakeholders that appeared here do.

2 One suggestion would be perhaps a consideration
3 on the part of the Board the addition of a provision in
4 the resolution recognizing, hey, this is a \$500,000,000
5 plan, but we do need more money, and to take all actions.
6 Now, I'm being a little general on this, because I think
7 all actions are conversations many of you are in a
8 position to have, some which we are, but to be crystal
9 clear that more money is needed, and those additional
10 steps ought to be taken.

11 It's on record. It's reflected in a resolution
12 along those lines, if they were entertained, could be
13 useful. I think it could be helpful.

14 CHAIR NICHOLS: So here's a thought. If we're
15 going to talk about a contingency plan, couldn't we do an
16 upward contingency plan, to show what we'd be able to do
17 if we had twice as much money?

18 EXECUTIVE OFFICER COREY: Yes.

19 CHAIR NICHOLS: Okay. I think that would be a
20 way to do it.

21 EXECUTIVE OFFICER COREY: Two more points.
22 Aviation fuel. We've been very encouraged on the Low
23 Carbon Fuel Standard the fact that many of the -- several
24 of which are represented here today, their interest in
25 participating in a Low Carbon Fuel Standard. Different

1 ways to participate. The fact of the matter is we're
2 engaged in serious conversations with that industry and
3 are beginning to work through what would amendments to the
4 regulation look like down the road.

5 We actually think this is a -- that there is --
6 they're there. We think this is a viable opportunity, and
7 one that we are working with them on. What I'm less clear
8 on is the timetable for those amendments. But I'm telling
9 you, that I expect to return to this Board with proposed
10 amendments to the Low Carbon Fuel Standard that folds in
11 the aviation element.

12 And there's really a relationship between that,
13 because that requires pathways to be developed, and leads
14 to a linkage, association between the proposal that what
15 discussed here for the low carbon transportation fuels.
16 Our read is that it allows for aviation to be captured.
17 We'd need to monetize -- or have a carbon intensity for
18 it. That's the currency.

19 But in other words, the proposal for low carbon
20 fuels, as proposed in this AQIP plan, can already capture
21 and recognize.

22 CHAIR NICHOLS: You think it does already include
23 that?

24 EXECUTIVE OFFICER COREY: We need a carbon
25 intensity. We need a pathway.

1 CHAIR NICHOLS: Okay.

2 EXECUTIVE OFFICER COREY: But in terms of from
3 a -- from a process standpoint, it allows for it. And if
4 I'm wrong on that, I need someone to correct me. I think
5 I --

6 CHAIR NICHOLS: No. You've got nodding behind
7 you. I can see the people behind you.

8 (Laughter.)

9 EXECUTIVE OFFICER COREY: And the last thing that
10 I wanted to cover, then Jack has got a few additional
11 points, is on CAPCOA. And as someone who's been her for a
12 few decades, that relationship wasn't always as good as it
13 needed to be. The fact is, and I think our CAPCOA
14 partners would attest to this, I think our working
15 relationship is as good as it's ever been.

16 And the fact is it really needs to be, because if
17 we've ever had a challenge from a criteria pollutant side,
18 from a toxics pollutant side, and as well as the
19 partnering that we're doing on GHGs, it's now, and it's
20 more than money. It's how do we work to get more
21 effective administratively, process-wise, the partnerships
22 that we're establishing through Enforcement you'll be
23 hearing about.

24 So -- and what I'm not proposing, because I just
25 need to have the follow-on conversation with the CAPCOA

1 Board, and Alan, and the commitment I'm making is to sit
2 down with Alan, the CAPCOA Board, and really talk process.
3 Where there are administrative opportunities to capitalize
4 on their strengths, the processes in place -- that they
5 already have in place. So, you know, I heard the South
6 Coast representative, I heard Alan's comments, and I don't
7 know what that building on the relationship looks like
8 from a AQIP standpoint, but the commitment is there to
9 work through that process.

10 CHAIR NICHOLS: Well, I thought what was
11 particularly interesting, or at least it triggered
12 something in my mind, the Air Resources Board, because we
13 are perceived as, you know, having a lot of authority and
14 power to affect lives and many different industries, we're
15 always being asked for more accountability, for more
16 transparency. And the legislature often is saying that
17 they want to have more oversight over how the money is
18 being spent, and making sure that the money that we are
19 expending is achieving results.

20 This is one area where I feel we could benefit
21 from utilizing the resources of the local air districts,
22 where they could take on a stronger role as partners in
23 this program in documenting the actual expenditures in the
24 programs, and holding each other accountable in terms of
25 getting the funds out the door, so that they can -- you

1 know, they would have to then compare and contrast, you
2 know, how they were doing in terms of the achievements
3 that they were getting from these funds.

4 So this is not all just, you know, getting money
5 and being able to do more. It's about really being able
6 to work together to establish the standards for review and
7 the ability to be able to make the most robust possible
8 assessment of what's working, and to the extent that it's
9 not, what isn't working, as we look at these programs on
10 an annual basis. I think we would all benefit from that.

11 VICE CHAIR BERG: And Chair Nichols, just looking
12 at what the Advisory Committee used to do, many of these
13 places -- many of these things are in place. I think it's
14 a matter of gathering the data. And so it might be a good
15 time to look at maybe reinstating the Advisory Committee
16 to get people back in a room. Because every time we do,
17 we really do come out with very good things.

18 CHAIR NICHOLS: Great.

19 EXECUTIVE OFFICER COREY: Very good. I got some
20 clear direction on that.

21 CHAIR NICHOLS: I hear -- ready to do that.

22 Okay. So can we now move to the actual
23 resolution and a vote, because it's a little past noon,
24 and I think this would be a good time to take a break,
25 once we finish our work here.

1 Yes, Ms. Takvorian.

2 BOARD MEMBER TAKVORIAN: Can I just ask one other
3 question.

4 CHAIR NICHOLS: Okay. Sure.

5 BOARD MEMBER TAKVORIAN: I didn't hear a response
6 about the school buses and --

7 CHAIR NICHOLS: Oh, the school buses. Yes,
8 you're right.

9 BOARD MEMBER TAKVORIAN: So the questions are --

10 CHAIR NICHOLS: What does it take?

11 BOARD MEMBER TAKVORIAN: -- how many are there,
12 what does it take, what's the cost? And then the second I
13 think would be on the proportional or non-proportional
14 reduction, I think you're asking for this, is what is
15 the -- what do the upward and downward scenarios look
16 like?

17 CHAIR NICHOLS: Yeah.

18 MOBILE SOURCE CONTROL DIVISION CHIEF KITOWSKI:

19 So let me -- let me talk a little bit about
20 school bus, the value of 3,500 buses -- a number of 3,500
21 buses was put out there. And as I said in the short
22 response before is there are different sort of levels of
23 dirtier school buses. And the very oldest, the ones that
24 pre-date safety standards, the pre-77s, we've done an
25 effective job of eliminating those. There's pre-87s that

1 are higher emission levels, and they're uncontrolled, but
2 meet safety standards. And then there are school buses
3 that have some controls on them, but are still so old we
4 couldn't put a particulate filter on them.

5 If you include all three of those categories,
6 that is the 3,500 number in the State. It's an accurate
7 number. To replace all of those would take somewhere in
8 the 400 to 500 million dollar range. So a fairly
9 significant amount of funding.

10 I will point out a couple of things that I think
11 are important to note. The Agency has had a strong
12 emphasis on school buses over the years. More than \$300
13 million has already gone to get us where we are today to
14 reduce that number down to 3,500. So in some ways, that
15 is a success sorry.

16 But maybe this Board -- also wanted to make sure
17 the Board was aware, in January, and we were able to do
18 this with Executive Officer approval, the -- we have
19 changed the Carl Moyer Program. And the Carl Moyer
20 Program has traditionally not been a good fit to fund
21 school buses, because it's based entirely on cost
22 effectiveness, and school buses don't drive enough miles
23 to really register all that high on cost effectiveness.

24 But recent legislative flexibility gave us the
25 ability to do that. School buses were such a priority

1 that we jumped ahead of the process we were doing and put
2 in place special cost effectiveness limits, much higher
3 cost effectiveness limits. So now, the Carl Moyer Program
4 and local district 923 funds, the DMV funds, can be used
5 to help in this process to help sort of bring down that
6 number.

7 So we've got -- you know, we do look at it in a
8 couple different ways. We do have some areas in process.
9 This funding plan is, you know, \$10 million, and that is a
10 piece, but holistically we are looking at broader ways to
11 tackle it.

12 CHAIR NICHOLS: Well, can I make a suggestion on
13 this one, because I think -- there were more than two of
14 us who thought that this was an area where we really
15 needed to focus some more attention. I'd like to ask the
16 staff to come back with a plan for addressing the full
17 scope of this problem. You can do it in tranches, so you
18 get the pre-1977s first and then the pre-1987s, and
19 looking at all the potential sources of funding, including
20 this one that we're dealing with right now, but also the
21 enforcement money, the Moyer money, whatever.

22 I want to say, within the next two years, some
23 very substantial progress getting that 3,500 number cut.
24 I don't know where it's going to -- how to get it to, but
25 I mean our goal should really be to not have any school

1 buses out there that are over a safe limit for kids to be
2 exposed to.

3 And that can't take decades, because those
4 particular kids are going to, by that time, be adults, and
5 not even riding the school bus. So let's see what we can
6 do to come up with a shorter term focused effort that just
7 deals with the buses.

8 But, you know, as part of your effort to do the
9 contingency a plan, up or down, I certainly think that
10 this -- putting more money into this program would be one
11 of the things you ought to be -- you ought to be looking
12 at.

13 EXECUTIVE OFFICER COREY: We got it. We'll work
14 on that plan.

15 DEPUTY EXECUTIVE OFFICER AYALA: And if I can
16 just point out, as Chair Nichols mentioned, in the next
17 item, after we come back from lunch, you're going to hear,
18 as part of the enforcement program presentation, a
19 discussion about supplemental environmental projects. And
20 one of the priorities in that program is indeed school
21 buses. So you're going to have an opportunity to hear and
22 get an update in terms of where we currently are with
23 respect to the enforcement program. But we can certainly
24 come back and put it all in a complete package, so that we
25 can go through the numbers and the overall plan.

1 CHAIR NICHOLS: I think that would be really
2 helpful.

3 Yes, Dr. Sherriffs.

4 BOARD MEMBER SHERRIFFS: I hate to harp on ag
5 waste, but is -- how soon are those biofuel facilities
6 likely to impact the problem of disposal of ag waste.

7 MOBILE SOURCE CONTROL DIVISION CHIEF KITOWSKI:

8 Well, let me jump in and talk about that a little
9 bit. Part of this is sort of an economic -- I mean, it's
10 largely an economic question. And what we're providing
11 this year is a per gallon substitute in our fuel program
12 in biofuel, and those facilities would be eligible.

13 What we have pushed all along, especially for the
14 fuel program and a few others, that they really need
15 continuous funding. What we're trying to do is promote
16 in-state production, and folks can look at the amount of
17 funding we can provide in one year with the per gallon
18 subsidy, but then they have to make an estimation and a
19 guess on the likelihood of being able to get that the next
20 year, and the next year after that, because you're not
21 going to invest in upgrading facilities if you think it's
22 just a one-year pot of funding.

23 So I think every facility is going to be making
24 individual choices. What we expect this first year, quite
25 honestly, is that those with existing facilities will use

1 that to expand production up to their current
2 capabilities, and we'll get that expansion out of the
3 program, but we need to be able to convey a stronger sense
4 of continuous funding and a source to truly make a big
5 difference in getting facilities like that to invest in
6 this area.

7 BOARD MEMBER SHERRIFFS: And do we have any kind
8 of rough estimate of what we hope that expansion might
9 represent, 10 percent, 20 percent, five percent?

10 MOBILE SOURCE CONTROL DIVISION CHIEF KITOWSKI:
11 I'm sorry, I don't.

12 CHAIR NICHOLS: All right. Are we ready to have
13 a --

14 VICE CHAIR BERG: Chair, I'd like to move on --
15 I'd like to move the motion with the amendment to the
16 resolution that we would include in the resolution Mr.
17 Corey's language to increase the funding to 750,000 to a
18 \$1,000,000, what we would do with the additional funding.

19 CHAIR NICHOLS: You 750 million. We're talking
20 millions.

21 VICE CHAIR BERG: I'm sorry, 750,000 to a
22 million. You said double it.

23 What we have now is 500 million?

24 BOARD MEMBER FLOREZ: 500 hundred to 750 million.

25 VICE CHAIR BERG: Million. So I'm saying 50

1 million to a billion. Sorry. I got my numbers confused.
2 750 -- and then you have real money, right? 750 million
3 to a billion, what we would do with that funding. So as
4 you laid out, Mr. Corey. And so I move that.

5 CHAIR NICHOLS: Do we have a second?

6 BOARD MEMBER RIORDAN: Second.

7 CHAIR NICHOLS: I will call for a vote then.

8 All --

9 BOARD MEMBER MITCHELL: Madam Chair?

10 CHAIR NICHOLS: Yes.

11 BOARD MEMBER MITCHELL: Do we want to also
12 include in the resolution that aviation fuel would be
13 included in the low NOx standard or did we not want to do
14 that.

15 CHAIR NICHOLS: I'm sorry, what was it?

16 BOARD MEMBER MITCHELL: That we would include
17 aviation fuel.

18 CHAIR NICHOLS: Oh, we -- I believe we heard that
19 aviation fuel is included --

20 BOARD MEMBER MITCHELL: It is included. Okay.
21 We don't need to --

22 CHAIR NICHOLS: -- and doesn't require an
23 amendment, so --

24 BOARD MEMBER MITCHELL: -- include it in the
25 resolution. All right.

1 CHAIR NICHOLS: That's -- so I was satisfied with
2 that.

3 Yes.

4 BOARD MEMBER FLOREZ: We're on a roll and I don't
5 want to throw us back to --

6 (Laughter.)

7 CHAIR NICHOLS: I'm driving us to a vote.

8 BOARD MEMBER FLOREZ: You know how that goes, but
9 I also don't want to miss something. Madam Chair, I'll
10 follow your lead and staff's lead on the proportional cut
11 to equity programs being exempted from the proportional
12 cuts, given it is a low number at this point in time.

13 CHAIR NICHOLS: I think what I heard, but let me
14 just restate it is that the -- is that if it was more than
15 what we could say is a nominal or small reduction, that
16 the staff will come back with a reprioritized list. And
17 although I'm not sure that they said this, but I hope they
18 heard it, that they would look at holding the projects
19 that are targeted towards the disadvantaged communities,
20 and low-income people, that those would be held harmless
21 in that situation. That's the -- that would be the
22 overarching goal.

23 VICE CHAIR BERG: And so what I heard on that is
24 if we were cut, up to about 20 percent. If we're cut
25 greater than 20 percent, they'll just come back to the

1 Board.

2 CHAIR NICHOLS: Yeah, I think that's right, that
3 they would come back at that point.

4 All right. Yes, Andrew.

5 AIR POLLUTION SPECIALIST PANSON: So specifying
6 that we would have to come back with less than 20 percent,
7 that has to go into the resolution. So just --

8 CHAIR NICHOLS: All right. So that will be --
9 without any objection, the maker of the motion is going to
10 add that to her resolution.

11 AIR POLLUTION SPECIALIST PANSON: Oh, and then
12 sorry --

13 VICE CHAIR BERG: So I --

14 AIR POLLUTION SPECIALIST PANSON: -- one more
15 question. If you want to -- if we scale down from a zero
16 percent reduction to 20 percent, if you want to hold the
17 equity projects unchanged, that also has to go into the
18 resolution, because that's not how we wrote it. So if you
19 want to say, you know, when we do the scaling, we wouldn't
20 scale the equity, that's --

21 CHAIR NICHOLS: That was the intent. That's what
22 I just meant.

23 AIR POLLUTION SPECIALIST PANSON: Yes. Okay.
24 Sorry. I just --

25 EXECUTIVE OFFICER COREY: That's what I

1 understood.

2 CHAIR NICHOLS: That's what the amendment would
3 be.

4 AIR POLLUTION SPECIALIST PANSON: Got it.

5 BOARD MEMBER TAKVORIAN: And just since we're
6 clarifying, so I really appreciate how you articulated the
7 bus plan, should that go in the resolution as well?

8 CHAIR NICHOLS: I think that's just a separate
9 direction from the Board, as opposed to being part of the
10 resolution on this funding plan.

11 BOARD MEMBER TAKVORIAN: Okay. So there's no
12 opportunity for this plan to be modified to include
13 more -- because I was hoping that that plan would have an
14 impact here.

15 CHAIR NICHOLS: I don't think it would come in
16 time to do that, because we're ready to start operating
17 under this plan as soon as it gets approved. Whereas, the
18 bus plan, I think, is going to take us at least a few
19 months in meetings to get together.

20 BOARD MEMBER TAKVORIAN: So is that a separate
21 resolution

22 CHAIR NICHOLS: So it could be part of the
23 scaling up.

24 BOARD MEMBER TAKVORIAN: Well, there you go. And
25 would that need to go into the resolution then?

1 EXECUTIVE OFFICER COREY: A commitment. I got
2 clear direction to develop that plan, and it's clear to us
3 that we need to begin work on it. We'll be returning to
4 the Board. So as you characterized, Chair, I think that's
5 several months, because it includes a few things. One,
6 the scope of the problem, two what are the range of pots
7 even those that we have authority over versus others to
8 put the whole picture together. What is the need, what
9 are the opportunities, what is the gap, and what are the
10 strategies for getting there? It's going to take us a few
11 months to pull together.

12 CHAIR NICHOLS: Okay. All right. Any other
13 clarifying questions or comments?

14 If not, then let's go ahead and we'll just do
15 this with a general voice vote.

16 All those in favor of the resolution as amended
17 please say aye?

18 (Unanimous aye vote.)

19 CHAIR NICHOLS: Opposed?

20 Abstentions?

21 All right. It's done. Thank you very much.
22 Good work.

23 And we will now break for lunch. And let's try
24 to be back here at 1:15.

25 (Off record: 12:15 p.m.)

(Thereupon a lunch break was taken.)

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1 A F T E R N O O N S E S S I O N

2 (On record: 1:24 p.m.)

3 CHAIR NICHOLS: Good afternoon. We're going to
4 go ahead and get started. Chairman Nichols is just around
5 the corner. She'll be joining us. We're going to start
6 with Agenda Item 16-6-3. And next, the Board will hear an
7 update from our Enforcement Division. The Enforcement
8 Division's annual report summarizes the results of action
9 taken by the Enforcement Division in 2015 and highlights
10 some of the key priorities and actions for the Division in
11 the coming year.

12 There's no question that the Enforcement Division
13 plays a critical role in regulation, not only between us
14 as the Board and passing regulation, but also for the
15 stakeholders.

16 So, Mr. Corey, would you please introduce this
17 item.

18 EXECUTIVE OFFICER COREY: Yes. Thank you, Vice
19 Chair Berg.

20 For years, the Enforcement Division posted its
21 annual report. This year, we're starting what I plan to
22 be annual updates to the Board from the Enforcement
23 Division. The retirement of the former Enforcement
24 Division Chief led to the hiring of Dr. Todd Sax in June
25 of 2015. I reported on that at the beginning of this

1 year.

2 Todd's background includes expertise in
3 inventory, modeling, and trucks, and is already helping to
4 strengthen our program. The annual enforcement report
5 results demonstrate how the Enforcement Division works to
6 ensure that the regulations adopted by this Board deliver
7 the emission reductions needed to achieve California's
8 clean air and greenhouse gas reduction goals.

9 Today's presentation provides an overview of the
10 Enforcement Division and its approach to achieving
11 compliance with ARB's regulations, including the specific
12 actions that Todd and his team are taking to improve the
13 process.

14 Now, I'd like to introduce Shannon Downey who
15 will begin the staff presentation.

16 Shannon.

17 (Thereupon an overhead presentation was
18 presented as follows.)

19 AIR RESOURCES ENGINEER DOWNEY: Thank you, Mr.
20 Corey.

21 Good afternoon, members of the Board. Today's
22 presentation will provide an overview of the Enforcement
23 Division's annual report, which discusses both the
24 Division's accomplishments in 2015 and our priorities for
25 the future.

1 While the majority of regulated industry meets
2 regulatory requirements, some do not. ARB has a strong
3 and active enforcement program, which conducts outreach,
4 inspects vehicles and equipment, investigates companies to
5 bring them into compliance, and ensures a level playing
6 field for those that we regulate. Our efforts are
7 evolving.

8 This presentation highlights the results of that
9 work in 2015.

10 --o0o--

11 AIR RESOURCES ENGINEER DOWNEY: In addition to
12 providing an overview of the annual report, I will provide
13 an overview of the programs we enforce. I will then move
14 on to a more in-depth discussion of important program
15 areas sharing with you our accomplishments in 2015.

16 Finally, I will lay out our approach for
17 addressing key challenges that we see in these areas.

18 Now, I will provide an introduction to our
19 enforcement programs.

20 --o0o--

21 AIR RESOURCES ENGINEER DOWNEY: The Enforcement
22 Division is responsible for enforcing most of ARB's
23 regulatory programs with an emphasis on vehicle, engine,
24 and parts certification; enforce rules related to diesel
25 and goods movement; fuels; stationary sources; and,

1 consumer products.

2 --o0o--

3 AIR RESOURCES ENGINEER DOWNEY: Our goal is to
4 ensure that compliance with the agency's rules and
5 regulations is broadly achieved in order to protect the
6 health of all Californians. We work to achieve this goal
7 by administering fair, consistent, and comprehensive
8 enforcement to the regulated community.

9 --o0o--

10 AIR RESOURCES ENGINEER DOWNEY: Enforcement
11 Division has a staff of 136 scientists, engineers, field
12 inspectors, and administrators. The Division also employs
13 over 40 part-time staff, who provide additional support
14 for program implementation. We provide training and
15 compliance assistance to help fleets meet requirements.
16 We identify noncompliance and enforce rules. We work with
17 other divisions to identify likely violators. We conduct
18 field inspections of vehicles and sample and analyze
19 products. We also receive tips from industry and
20 complaints from the public.

21 More recently, we are expanding into more
22 sophisticated data mining techniques. No matter how we
23 identify cases, our goal is to resolve each violation.

24 --o0o--

25 AIR RESOURCES ENGINEER DOWNEY: We work to bring

1 each violator into compliance. We settle the vast
2 majority of our enforcement cases through the mutual
3 settlement process. Infrequently, when we're unable to
4 reach a settlement with the violator, we work closely with
5 our Legal Office to refer the case to the California
6 Attorney General, or district attorney, for litigation.

7 The case is closed when the violator has met
8 compliance requirements and pays a penalty for
9 noncompliance.

10 --o0o--

11 AIR RESOURCES ENGINEER DOWNEY: Penalties serve
12 two purposes: To deter future noncompliance, both from
13 the violating business itself, and more broadly the
14 industry in general, and to level the playing field by
15 removing any profit gained from noncompliance. Penalties
16 must be significant enough to address the nature of the
17 violations, and the resulting harm to public health.

18 They must also recognize the actions taken by the
19 violator to return to compliance. We pay particular
20 attention to the financial impact our penalties impose on
21 the violator. Our goal is to achieve fair, comprehensive,
22 and efficient compliance, not drive companies out of
23 business.

24 --o0o--

25 AIR RESOURCES ENGINEER DOWNEY: Violators may be

1 eligible to participate in a Supplemental Environmental
2 Project, or SEP. SEPs are environmentally beneficial
3 projects that a violator agrees to contribute part of
4 their penalty amount to as part of a settlement. ARB
5 currently has three SEPs into which violators may choose
6 to pay up to 25 percent of their penalty.

7 These include: The diesel school bus emission
8 reduction SEP, which provides funding for school districts
9 to retrofit or replace their diesel school buses or
10 trucks; the California Council on Diesel Education and
11 Technology SEP, which supports training programs for
12 diesel mechanics at six community colleges across the
13 State, which helps ensure diesel engines and their
14 emissions control system are well-maintained by an
15 educated workforce; The Small Engine Maintenance and
16 Repair SEP provides training to maintain and repair small
17 off-road engines.

18 In 2015, more than \$1.6 million were diverted to
19 these programs. In late 2015, the Governor signed AB
20 1071. AB 1071 requires ARB to revise its SEP policy to
21 allow violators to pay up to 50 percent of their penalty
22 to an eligible SEP with a focus on increasing the
23 availability of SEPs in disadvantaged communities. Staff
24 is currently developing a revised SEP policy.

25 --o0o--

1 AIR RESOURCES ENGINEER DOWNEY: 2015 was a
2 successful year. We received and resolved nearly 12,000
3 complaints, issued almost 13,000 registrations for
4 portable equipment, and trained over 6,000 people. Staff
5 conducted more than 32,000 inspections, issued more than
6 4,400 citations, and closed 440 investigations.

7 --o0o--

8 AIR RESOURCES ENGINEER DOWNEY: Those cases and
9 citations resulted in penalties totaling more than \$34
10 million.

11 --o0o--

12 AIR RESOURCES ENGINEER DOWNEY: I will now
13 discuss some of our programs in more detail starting with
14 diesel fleet regulations.

15 --o0o--

16 AIR RESOURCES ENGINEER DOWNEY: The Division
17 enforces in-use requirements on many types of equipment,
18 including trucks, ships, and off-road equipment, in
19 addition to the fuels they use.

20 --o0o--

21 AIR RESOURCES ENGINEER DOWNEY: Our enforcement
22 efforts are focused on three major activities:
23 Inspections, investigations, and outreach to disadvantaged
24 communities.

25 --o0o--

1 AIR RESOURCES ENGINEER DOWNEY: One of our
2 primary functions is to enforce diesel regulations in the
3 field. Our inspectors work in conjunction with the
4 California Highway Patrol to inspect trucks and buses
5 operating on California's roadways to ensure compliance
6 with ARB's diesel regulations.

7 Our staff also inspects ships, transportation
8 refrigeration units, cargo handling equipment, and many
9 other sources. Citations are issued for non-compliance.

10 Over the last few years, the number of citations
11 we issue has increased. Compared to 2014, we issued 35
12 percent more truck citations in the field. This increase
13 in citations issued is likely due to our increased
14 presence in disadvantaged communities, as well as the
15 growing number of trucks and buses with compliance
16 requirements under ARB regulations.

17 --o0o--

18 AIR RESOURCES ENGINEER DOWNEY: Using the media
19 is an important part of our approach to enforcement. In
20 2015, we held four media events in Stockton, Boyle
21 Heights, the Inland Empire, and Pacoima. This work is
22 continuing in 2016. Our goal is to get the word out that
23 ARB is enforcing diesel regulations. When the regulated
24 community understands we are enforcing, they are more
25 likely to take the actions necessary to comply.

1 In 2015, as a result of our media efforts, 14
2 articles were published in print, the Internet, and
3 television, including five in Spanish and two in Mandarin.
4 Here's a recent video from last week describing our field
5 enforcement efforts in Fresno.

6 (Thereupon a video was played.)

7 "MR. TAVIANINI: My name is Mark Tavianini with
8 the California Air Resources Board.

9 We're out here today conducting inspections of
10 heavy-duty vehicles for compliance with air emissions
11 rules. We pulled the vehicles over, take a look at the
12 exhaust, take a look at the engines to see if they are
13 compliant with the Air Resources Board's rules for our
14 truck and bus regulation, and we look for tampering with
15 the engines. Those are pretty much the kinds of things
16 that we inspect for.

17 If we find violations, we will issue a citation.
18 Those carry penalties and the vehicles need to be brought
19 into compliance after that. And we're doing this because
20 we know the air quality in valley is pretty poor. Diesel
21 vehicles and freight transport is a big part of that
22 problem, and we are trying to get a handle on that by
23 making sure that we clean up the truck fleet, so that we
24 get newer and newer engines's. That's what we're doing".

25 (Thereupon the video concluded.)

1 --o0o--

2 AIR RESOURCES ENGINEER DOWNEY: Staff conducts
3 investigations at ports focusing on ships, cargo handling
4 equipment, harbor craft and other sources. In 2015, staff
5 settled 34 cases for \$477,187. Two example settlements
6 are listed on this slide.

7 --o0o--

8 AIR RESOURCES ENGINEER DOWNEY: In addition, to
9 individual vehicle and equipment inspections, we also
10 investigate entire truck fleets for compliance with in-use
11 diesel regulations, such as truck and bus, drayage, and
12 specialized fleet rules. This approach was successful.
13 In 2015, we settled 187 cases with assessed penalties
14 totaling slightly more than \$4 million.

15 This slide highlights two of the larger cases we
16 settled, including a case settled with an out-of-state
17 fleet operator.

18 --o0o--

19 AIR RESOURCES ENGINEER DOWNEY: While penalties
20 can be substantial for large truck and bus fleets with
21 significant violations, the median penalty taken in 2015
22 was approximately \$7,700. In 2015, the average time it
23 took staff to take a case from initiating an audit to
24 settlement was 13 months. Historically, we selected
25 fleets to investigate based on complaints from the

1 community or tips from businesses who made the investments
2 needed to comply.

3 And while in 70 percent of the cases we
4 investigated, we identified violations and settled the
5 case, we also investigated 84 fleets that were ultimately
6 found to be compliant. As a result, in addition to
7 responding to tips and complaints, we have also been
8 exploring opportunities to prioritize the truck and bus
9 fleets we investigate.

10 --o0o--

11 AIR RESOURCES ENGINEER DOWNEY: You may recall we
12 introduced the smart audit approach to you in January.
13 The smart audit approach adds a data-driven component,
14 prioritizing the investigation of fleets with the highest
15 potential of noncompliance first.

16 The smart audit approach involves the merging of
17 multiple data sources, including vehicle registrations,
18 into one database. We've made much progress since our
19 last report. Every fleet operating in California,
20 regardless of state of registration, is subject to the
21 smart audit approach.

22 --o0o--

23 AIR RESOURCES ENGINEER DOWNEY: Through the smart
24 audit process, fleets are evaluated using multiple audit
25 indicators, such as potentially noncompliant trucks, and

1 number of citations issued. Fleets with the highest audit
2 score are ranked and then prioritized for investigation.

3 This table shows actual results of the current
4 smart audit criteria. Investigations must still be
5 conducted to verify a fleet is, in fact, in violation.
6 However, with the new smart audit process, we now have a
7 list of trucks in each fleet which should reduce the
8 length of time necessary for each investigation.

9 --o0o--

10 AIR RESOURCES ENGINEER DOWNEY: In early 2014,
11 ARB assessed the compliance rate for the truck and bus
12 rule. At that time, staff found 85 percent compliance.
13 Using a consistent methodology with January 2016 data, we
14 believe the statewide compliance rate for heavy trucks to
15 be between 70 and 75 percent. The compliance rate is
16 lower than in 2014, and this presents a challenge.

17 --o0o--

18 AIR RESOURCES ENGINEER DOWNEY: To address this
19 challenge, we are looking at a number of opportunities to
20 increase our effectiveness. We are now prioritizing
21 investigations focusing on the worst offenders first. We
22 are working on procedures to accelerate the time it takes
23 to bring fleets into compliance by streamlining our case
24 management process.

25 We are also focusing on brokers. Brokers are

1 businesses that dispatch trucks on behalf of their
2 clients. ARB regulations require brokers to hire
3 compliant fleets.

4 Finally, we are focusing our efforts in areas
5 that need it most, disadvantaged communities.

6 --o0o--

7 AIR RESOURCES ENGINEER DOWNEY: In 2015, we set a
8 goal that more than 50 percent of all diesel field
9 inspections would occur in disadvantaged communities. We
10 exceeded this goal, achieving 64 percent of our
11 inspections in disadvantaged communities.

12 To further address community concerns, in 2015,
13 we formed a six-member team to focus on disadvantaged
14 communities in specific areas of the state, the Los
15 Angeles region, Imperial Valley, the San Francisco Bay
16 area, San Diego, the greater Sacramento area, and the San
17 Joaquin Valley. Within these regions, the assigned team
18 member attends community meetings to stay informed of
19 their issues and focus enforcement efforts within each
20 community. These staff also work to identify locations
21 where trucks illegally idle and provide "No Idling" signs
22 for installation.

23 --o0o--

24 AIR RESOURCES ENGINEER DOWNEY: I will now
25 discuss our enforcement of certification programs focused

1 on vehicles, engines, and aftermarket parts.

2 --o0o--

3 AIR RESOURCES ENGINEER DOWNEY: To ensure that
4 new vehicles sold into California are as clean as
5 possible, the Enforcement Division works to ensure that
6 automakers comply with State laws. New vehicles and
7 engines sold in California are required to be certified to
8 emission standards and to remain durable so that the
9 emissions remain low over the life of the vehicle.

10 Similarly, manufacturers of aftermarket
11 performance and repair parts must demonstrate that their
12 products do not adversely impact emissions or emission
13 control systems on certified vehicles in order to be sold
14 in California.

15 --o0o--

16 AIR RESOURCES ENGINEER DOWNEY: Manufacturers of
17 add-on and modified parts, such as catalytic converters,
18 turbo chargers, computer devices, and exhaust systems must
19 demonstrate that the use of their products doesn't result
20 in increased emissions. State law exempts parts used in
21 dedicated race or competition vehicles from these
22 requirements.

23 --o0o--

24 AIR RESOURCES ENGINEER DOWNEY: The prevalence of
25 racing aftermarket parts exceeds true racing demand and

1 the market is growing. These parts are not certified or
2 approved by ARB, and often remove, or render inoperable an
3 emission control device. The products are legal and
4 covered by statutory exemption if used on a competition
5 vehicle in legitimate racing applications.

6 However, their use in certified vehicles and
7 non-racing applications is not legal and results in
8 significantly increased emissions.

9 In 2011, ARB formed a new section to prioritize
10 enforcement of the aftermarket parts sector.

11 --o0o--

12 AIR RESOURCES ENGINEER DOWNEY: Since 2011, we
13 have increased our focus on illegal aftermarket parts
14 cases causing a significant increase in the number of
15 settlements in the recent years. We have assessed over \$6
16 million in penalties, including \$2 million in 2015.

17 These cases are having a significant impact in
18 the industry, elevating awareness, And deterring future
19 violations.

20 --o0o--

21 AIR RESOURCES ENGINEER DOWNEY: We also focus on
22 new vehicles certified and sold in California. The
23 Volkswagen case is the latest example. I want to make a
24 point to highlight the important role ARB's El Monte staff
25 played in this case. Late last year, as a result of

1 staff's investigation, Volkswagen executives admitted to
2 installing defeat devices on their diesel cars.

3 We are currently working with the United States
4 EPA, United States Department of Justice, the California
5 Office of the Attorney General, and Volkswagen to settle
6 these violations. On April 21st, Judge Charles Breyer in
7 the United States District Court in San Francisco
8 announced that Volkswagen and government agencies had
9 reached an agreement in principle to address Volkswagen's
10 2.0 liter vehicles.

11 While we cannot provide additional details at
12 this time, we expect more information will become publicly
13 available on June 28th. We'll be providing more
14 information to the Board and to the public at that time.

15 --o0o--

16 AIR RESOURCES ENGINEER DOWNEY: The automotive
17 and parts industries are highly competitive. When a
18 company makes a decision to sell racing parts in
19 non-racing applications or to install defeat devices in
20 their vehicles, they do so to gain a competitive advantage
21 in the market.

22 Left unchecked, these violations create a market
23 incentive for others to cheat, which undermines our
24 regulatory program. Enforcement actions against
25 individual companies send a powerful message to the

1 industry that they must meet regulatory requirements.
2 However, when noncompliance is more widespread, additional
3 actions are necessary.

4 ARB is now investigating every light-duty diesel
5 automobile manufacturer and is working to determine better
6 ways of limiting the sale and purchase of racing parts to
7 consumers for competition only. In the meantime, there
8 are lessons to be learned from Volkswagen and the
9 aftermarket parts industry. Both regulatory program and
10 enforcement staff are working to develop and implement
11 improvements to the certification process, in-use testing
12 programs, and enforcement efforts to further deter these
13 types of violations in the future.

14 --o0o--

15 AIR RESOURCES ENGINEER DOWNEY: Now, I will
16 discuss our district support programs and enforcement of
17 greenhouse gas early actions.

18 --o0o--

19 AIR RESOURCES ENGINEER DOWNEY: One of the major
20 responsibilities of the Enforcement Division is to provide
21 support to the enforcement efforts of local air districts.
22 To provide this support, Enforcement Division staff works
23 closely with California's air districts and the California
24 Air Pollution Control Officers Association, or CAPCOA,
25 assisting with the resolution of more challenging local

1 enforcement cases, and providing technical support when
2 needed.

3 Staff provides training, enforcement support, and
4 implements a registration program for portable equipment.

5 --o0o--

6 AIR RESOURCES ENGINEER DOWNEY: Our district
7 support program provides specialized expertise to assist
8 air districts in addressing complex or challenging local
9 enforcement cases. ARB also has an oversight role in air
10 district enforcement programs. Our staff provides
11 oversight and training to California's air district
12 hearing boards.

13 Hearing boards are empowered to grant temporary
14 relief from local air pollution requirements to address
15 temporary process upsets or unforeseen circumstances.

16 --o0o--

17 AIR RESOURCES ENGINEER DOWNEY: Our training
18 program supports air districts by offering uniform
19 training to air district and industry staff. In 2015, we
20 enrolled nearly 6,500 students 169 classes.

21 These classes were offered on-line, in class, and
22 in the field. One of our most well attended classes,
23 Visual Emission Evaluation, trains inspectors and the
24 regulated community to accurately evaluate smoke plumes.
25 This is very important, because there are more than 40,000

1 stationary source permits issue statewide that have
2 opacity standards in them, which can only be enforced by
3 visual emission certified inspectors. In 2015, we began
4 offering this certification to community members.

5 --o0o--

6 AIR RESOURCES ENGINEER DOWNEY: Another area
7 where the Enforcement Division supports local air
8 districts is through the Portable Equipment Registration
9 Program, or PERP. The PERP regulation was adopted in 1997
10 to allow portable engine and equipment owners the option
11 of operating their equipment statewide with a single ARB
12 registration, rather than obtaining a permit in each
13 district where the equipment is operated.

14 In 2015, we processed nearly 13,000 registrations
15 or renewals. This volume is similar to the number of
16 stationary source permits issued at many large air
17 districts across the state.

18 --o0o--

19 AIR RESOURCES ENGINEER DOWNEY: The Division also
20 enforces greenhouse gas early actions adopted by the
21 Board. The first programs to be enforced have been
22 stationary source oriented measures focusing on
23 refrigerant management, gas insulated switchgear, and
24 landfills.

25 The violations of ARB's cap and trade and

1 mandatory greenhouse gas reporting regulations are
2 enforced directly by ARB's legal team and are not
3 discussed here.

4 This table highlights the number of cases we have
5 settled and the penalties we have assessed to ensure that
6 compliance with the early action programs the Division
7 currently enforces. The landfill methane control
8 regulation is primarily enforced by California's air
9 districts. The districts enforce ARB's requirements
10 concurrently with federal and local volatile organic
11 compound emission control regulations applicable to
12 landfills. Enforcement Division staff provides training
13 and enforcement support to air district staff when needed.

14 --o0o--

15 AIR RESOURCES ENGINEER DOWNEY: Finally, I will
16 discuss our actions currently underway to address the
17 challenges we have discussed.

18 --o0o--

19 AIR RESOURCES ENGINEER DOWNEY: Looking ahead, we
20 are working to understand compliance rates in major
21 regulations we enforce and to improve the enforceability
22 of future regulations. We are working to become more
23 efficient in how we investigate diesel fleets, and to
24 focus our efforts in ports, railyards, and on high
25 emitting trucks.

1 We are working to address defeat devices in
2 vehicles and aftermarket parts and we are expanding
3 enforcement efforts in programs like shore power, the Low
4 Carbon Fuel Standard, and the tractor trailer greenhouse
5 gas rule.

6 --o0o--

7 AIR RESOURCES ENGINEER DOWNEY: As you've seen,
8 Enforcement Division has accomplished a lot in the past
9 year and our workload is growing. External partnerships
10 are helping to expand enforcement resources. For example,
11 in 2015, we expanded our partnership with the San Diego
12 County Air Pollution Control District. San Diego County
13 staff now conduct inspections on our behalf at CHP scales
14 and cold storage facilities along the U.S.-Mexican border.

15 However, external partnerships and internal
16 efficiencies are only part of the solution. For the past
17 year, we have been working with ARB's Office of
18 Information Systems to develop and investigation
19 management system. This system will help the Division
20 manage and standardize case loads across programs and
21 staff.

22 Through this system, we will improve our ability
23 to manage staff, and case work, redeploy staff on emerging
24 priorities, and support future resource needs assessments.

25 --o0o--

1 AIR RESOURCES ENGINEER DOWNEY: We have two
2 future Board items scheduled for your consideration. Late
3 this year, we anticipate bringing you an updated policy on
4 the implementation of supplemental environmental projects,
5 to meet AB 1071 requirements. In addition to the updated
6 policy, we will be presenting a list of potential projects
7 to be funded and a description of the mechanism for
8 funding.

9 In the spring of 2017, we anticipate bringing
10 regulatory updates to the Portable Equipment Registration
11 Program and associated Air Toxics Control Measure for your
12 consideration.

13 --o0o--

14 AIR RESOURCES ENGINEER DOWNEY: This concludes
15 the presentation. Our annual report is posted on-line and
16 provides additional detail about the topics we have
17 discussed today. We appreciate the opportunity to present
18 to you today and will answer any questions you may have.

19 Thank you.

20 CHAIR NICHOLS: Any questions?

21 I just have a comment really. I want to say that
22 I think this is the best report yet. So we're building on
23 success. The reorganization work that you all have done
24 and the focusing on highest priorities and just overall
25 doing what I think is probably the most critical thing

1 about an enforcement program was just making sure that it
2 is visible, but also that it is -- we're focusing on the
3 right things, on the big things, and that we're proceeding
4 in an active way is absolutely essential to the
5 credibility of the overall program.

6 I think, you know, the legal staff has, I know,
7 worked with you closely to -- and others to make sure that
8 our regulations, as we go forward, are enforceable.
9 Whenever we come up with a situation, as we have
10 occasionally, where we have a regulation that we're trying
11 to enforce and perhaps not have done it in a while, and
12 suddenly we find out that there were some real issues
13 about whether it was enforceable, that is a -- that is a
14 waste of resources and not a good situation. So I think
15 this is all moving in the right direction, and I just
16 really want to commend you for it.

17 I see that a couple people want to speak. First,
18 John Eisenhut.

19 BOARD MEMBER EISENHUT: Yeah. Thank you. Your
20 next to the last slide, can you expand on portable
21 equipment and what that might look like?

22 ENFORCEMENT DIVISION CHIEF SAX: I can, yes.

23 Portable equipment are larger diesel engines.
24 They can be used as -- sorry, let me move it a little
25 further away. They can be used as chippers or power

1 generators. They are typically on trailers, so they can
2 pulled by trucks, but they're not self-propelled, so
3 they're their own category.

4 Because they can be operated anywhere in the
5 State, we have a registration program that allows the
6 vehicles to be registered through the State rather than
7 each local air district where they operate.

8 And one of the issues that we ran into is that
9 there were fleet average requirements in the Air Toxics
10 Control Measure for that rule, and they were coming due in
11 2017. And because of some issues with regards to engine
12 and retrofit availability for those engines, we do not
13 believe that the majority of industry would be able to
14 comply with those regulatory requirements.

15 And as a result, we are working with industry to
16 amend the regulation, and we anticipate bringing that to
17 the Board early next year.

18 BOARD MEMBER EISENHUT: Thank you.

19 CHAIR NICHOLS: Anybody else?

20 Did you -- yes, Ms. Mitchell.

21 BOARD MEMBER MITCHELL: Thank you. Thank you,
22 Madam Chair.

23 We talked this morning about the 3,500 buses that
24 are -- need to be retrofitted. And I'm looking at slides
25 8 and 10, and these reference the supplemental

1 environmental projects. One of those is diesel school --
2 school bus -- diesel school bus clean up. And it does say
3 here that one half of the penalties can be given to these
4 SEPs. I noticed that the penalties in slide 10 show 34
5 million in penalties. Does that mean that we can look to
6 having 17 some million donated to cleaning up the diesel
7 school buses?

8 ENFORCEMENT DIVISION CHIEF SAX: So I can answer
9 that a couple a ways. First of all, the current rules,
10 prior to the adoption of AB 1071 allowed the option of
11 diverting up to 25 percent of a penalty to a supplemental
12 environmental project. And one of those projects they
13 could donate to is the school bus SEP.

14 The school bus SEP is administered by the San
15 Joaquin Valley board. And they've been accruing money in
16 anticipation of doing a solicitation to do a couple of
17 things. One is, if you recall, there were a number of
18 clear filters that were recalled, and so those buses
19 currently have empty cans. And the money that that SEP --
20 the money in that SEP would be used to put replacement
21 filters in those cans for those buses.

22 There are also other opportunities for funding
23 through that SEP, and we expect that that money will be
24 spent later this year.

25 With regards to the 3,500 school buses, I would

1 point out a couple of things. One of them is that the
2 truck and bus rule that is on the books does regulate
3 school buses, and they are required to have filters. And
4 so many of those older buses that are actually out on the
5 roads, if they're able to, and they complied with the
6 regulations, they should have diesel particulate filters,
7 which will protect school children from exposure to diesel
8 exhaust. But not every school district was able to comply
9 and so there a an issue there that we need to address.

10 Finally, I would say that under our current
11 policy for supplemental environmental projects, we -- the
12 policy requires that the money not be spent to pay for
13 compliance. That is a policy issue we can grapple with.
14 It does allow, for example, that buses that are not
15 compliant could be assisted to overcomply. So right now
16 if the rule requires that they have a filter, we could
17 potentially use SEP money to get them into a 2010 bus or
18 to get them into a zero or near zero emission bus. And we
19 believe there are a lot of opportunities for that.

20 And so going forward, as we develop the new
21 supplemental environmental project policy, and the
22 associated mechanism to be able to spend that money, I
23 think there will be a lot of opportunities to help address
24 the issue that was identified this morning.

25 BOARD MEMBER MITCHELL: Thank you.

1 CHAIR NICHOLS: Yes, Dr. Balmes.

2 BOARD MEMBER BALMES: Well, I just had a more
3 overarching question about the -- how the money is spent
4 that is collected through enforcement other than the SEPs?
5 Is there a sort of a standard operating procedure for the
6 monies or is it totally discretionary?

7 ENFORCEMENT DIVISION CHIEF SAX: So the penalties
8 that we put into our report represent penalties assessed.
9 Most, if not nearly, all of those penalties are ultimately
10 collected and they are deposited into the Air Pollution
11 Control Fund.

12 BOARD MEMBER BALMES: And then it's use from the
13 Air Pollution Control --

14 ENFORCEMENT DIVISION CHIEF SAX: Yeah, and then
15 it can be appropriated by the legislature for uses as they
16 choose.

17 BOARD MEMBER BALMES: Thank you.

18 CHAIR NICHOLS: Yes, please.

19 BOARD MEMBER SHERRIFFS: Small compared to
20 Volkswagen, but a question regarding the complaint
21 program. What's been the response of the public in terms
22 of, for example, the smoking vehicle complaints, and is
23 that something that we should be working to encourage more
24 of and how would we do that?

25 ENFORCEMENT DIVISION CHIEF SAX: So I think it --

1 so we do receive quite a bit of complaints on these
2 vehicles. And one of the things we're trying to do is
3 figure out how to more efficiently address them. So we've
4 worked -- the complaints are also being worked into the
5 smart audit process. So when we get more complaints about
6 vehicles that are tied to a particular fleet, we would
7 investigate those fleets. When we do get idling
8 complaints, for example, we do go out and try to address
9 them. We can't always find the trucks that are idling at
10 that time.

11 The response from the public is, you know, they
12 provide complaints and we address them. I don't have much
13 more information than that, but there is definitely, I
14 think, some opportunities for improvement in that program
15 and that's something we can look at going forward.

16 CHAIR NICHOLS: Yes, Sandy.

17 VICE CHAIR BERG: I just wanted to say I'm unique
18 on this Board, in the fact that I am a regulated party.
19 And I have been on the investigation side from both DTSC
20 South Coast Air Quality, and ARB, because we do regular
21 inspections --

22 (Laughter.)

23 VICE CHAIR BERG: -- of my two businesses. And
24 what always impresses me is that that the understanding
25 from enforcement that as you're inspecting -- and I was so

1 appreciative of this of ARB, when they showed up at my
2 facility that you're there to learn about a business but
3 also to make sure it's in compliance. And the way that we
4 interact with our stakeholders is so incredible. To me,
5 it's as important as it is investigating and being visible
6 as Chair Nichols said. And I want to congratulate you,
7 because I have heard from stakeholders that in
8 investigating that being part of that process, no
9 one -- we all shutter when investigators show up. But the
10 fact that we can learn from each other, and that we don't
11 feel like you're gunning for us. And from what I've heard
12 from the ARB Enforcement that's not the case. And so I
13 really want to congratulate you and job well done.

14 CHAIR NICHOLS: Okay. Yes, Ms. Takvorian.

15 BOARD MEMBER TAKVORIAN: Thank you. Thank you
16 for report. Appreciate it.

17 So I wanted to ask more questions about the SEPs,
18 and particularly the AB 1071, you said that there was a
19 plan being developed. And I wondered when that would be
20 coming back to the Board.

21 ENFORCEMENT DIVISION CHIEF SAX: So, yes, there
22 is a plan being developed. One of things we are doing is
23 updating our policy. We anticipate going to workshops and
24 then taking that policy also to the environmental -- the
25 environmental justice related enforcement meetings that we

1 attend in those areas that we mentioned in the slides.

2 Part of those discussions are going to be working
3 on getting public input to the proposed policy, and part
4 of it will be getting ideas for the types of projects that
5 might potentially be funded in disadvantaged communities.
6 And we anticipate coming to the Board in late this year,
7 currently planning on December.

8 BOARD MEMBER TAKVORIAN: Okay. Thanks.

9 And then my second question was I thought I heard
10 you say that the SEPs that related to 1071 were the SEPs
11 that you showed on the slide, the three SEPs that you
12 articulated. I thought that these SEPs were going to be
13 specifically for impacted communities, and would be
14 different.

15 ENFORCEMENT DIVISION CHIEF SAX: So the SEPs that
16 you're seeing on the slide are long-standing SEPs that
17 we've had in place for the last, you know, in the case of
18 CCDET, 15 years. I think what you're going to see with
19 the development of the new policy is that there is going
20 to be a different procedure for SEPs. And so I anticipate
21 that, for one, we're going to be changing the way in which
22 we solicit from violators the opportunity to donate to
23 SEPs, since we'll be allowed to donate up to 50 percent of
24 a proposed penalty to that fund, and also new ways of
25 making sure that those projects actually get funded.

1 So what you're seeing now is a report on what
2 we've done in the past. I think what you'll see in
3 December is a movement towards a different model.

4 BOARD MEMBER TAKVORIAN: Got it. So then my last
5 question/comment is related to building in a way that the
6 benefits of the penalties go to impacted communities. And
7 we talked about this when you did the briefing that it's
8 often all over the state if it's a fleet. But I just
9 encourage you to figure out ways that the communities that
10 are impacted by the lack of compliance are also benefiting
11 from the SEP and the penalty.

12 ENFORCEMENT DIVISION CHIEF SAX: Absolutely, yes,
13 we will.

14 BOARD MEMBER TAKVORIAN: Thank you.

15 CHAIR NICHOLS: I did not see a breakdown on how
16 enforcement is affecting disadvantaged communities, which
17 we've been talking about so much. And I know we're part
18 of a CalEPA-wide task force that's working on that issue,
19 in terms of making sure that our resources are being
20 properly directed, and that we're making every effort to
21 target the places where the effects of noncompliance are
22 the most concerned. But I'm curious to know if you have
23 any additional comments on what's going on in that effort?

24 ENFORCEMENT DIVISION CHIEF SAX: Sure. A couple
25 of things. So we did mention in the slides that we set a

1 goal to conduct 50 percent of our diesel-related
2 inspections in disadvantaged communities --

3 CHAIR NICHOLS: You did. That's true.

4 ENFORCEMENT DIVISION CHIEF SAX: -- and we
5 achieved 64 percent. And that was -- you know, we've made
6 a concerted effort to change some of the locations where
7 we do our work to make sure that we're focusing in those
8 communities. And we've seen a benefit in terms of an
9 increased citation rate for the trucks that we pull over
10 and inspect.

11 In addition to that, we have been working very
12 closely with CalEPA, and it's been a very good productive
13 partnership with them and the Department of Toxics,
14 Integrated Waste Management Board, the Department of
15 Pesticide Regulation. And in the past year, we conducted
16 with them two different community -- two different
17 community sort of enforcement related projects. One was
18 in Boyle Heights and the other was in Pacoima.

19 And as part of that, there were community
20 meetings up front to identify what the community concerns
21 were. A number of us, including myself, took a bus tour
22 of both communities to identify what the issues were. And
23 then we deployed enforcement resources in those
24 communities to look at a number of different things. For
25 us, that meant looking at noncompliant trucks. We took

1 samples of consumer products at Dollar Stores. We
2 conducted inspections of stationary sources for the
3 refrigerant management program.

4 And CalEPA is currently developing a report from
5 the results of those two community studies. And we
6 believe that under the Governor's budget, this will be a
7 more permanent effort going forward to have sort of a
8 multi-media enforcement task force to look at
9 disadvantaged communities. And we think it's going to be
10 a very good model going forward for looking at and
11 assessing, and really trying to get to the bottom of some
12 of the at least enforcement related issues that are
13 happening in these communities.

14 CHAIR NICHOLS: And I was remiss in not
15 mentioning the diesel inspection efforts and how they had
16 been targeted, because I know that in terms of the
17 assessment of risk of toxic chemicals, that from what's
18 within our jurisdiction, that the diesel particulate does
19 rank as the number one risk area. So that's absolutely
20 the right thing to be focused on. But I had heard a
21 little bit about this sort of community effort. I wanted
22 to give you a chance to talk a little bit more about that.

23 Any other comments, questions?

24 All right. Great. Thank you so much.

25 Our next report is also a -- sorry where am I?

1 Did I miss something?

2 Yes, I did.

3 Okay. Here we go. Here's number 3 in my book.
4 Oh, because it was taken out of order that's why, because
5 we took it out of order.

6 Okay. So enforcement and air quality progress.
7 Okay. Perfect. So we have another informational
8 presentation opportunity for the Board to get caught up on
9 the progress that we've been making on meeting our air
10 quality objectives. And again, this is looking at both
11 environmental justice and non-environmental justice
12 communities attempting to sort of tease out some of the
13 specific issues that relate to the disadvantaged
14 communities, but also looking at it in the context of
15 overall statewide progress. So we would like to hear next
16 from Mr. Corey.

17 EXECUTIVE OFFICER COREY: Thank you, Chair. ARB,
18 as you know, is committed to air quality for --
19 improvement for all Californians, healthy air quality.
20 And environmental justice considerations have helped to
21 inform ARB's priorities and shape its programs, notably
22 your reference to the diesel risk reduction plan, our
23 enforcement activities just discussed, and the projects
24 under the Greenhouse Gas Reduction Fund.

25 Today, staff will address the issue of how

1 changes in the concentration of pollutants over the last
2 25 years in EJ census tracts compare to non-EJ census
3 tracts as identified by the environmental justice
4 screening method.

5 And with that, I'll ask Alvaro Alvarado of the
6 Research Division to give the staff presentation.

7 Alvaro.

8 (Thereupon an overhead presentation was
9 presented as follows.)

10 AIR RESOURCES SUPERVISOR I ALVARADO: Thank you,
11 Mr. Corey. Good morning, Chair Nichols and members of the
12 Board.

13 --o0o--

14 AIR RESOURCES SUPERVISOR I ALVARADO: Our
15 presentation on air quality progress in California
16 communities will be a summary of the 25-year trend in
17 lowering air pollution levels in environmental justice
18 communities compared to non-environmental justice
19 communities. There have been many prior studies that show
20 a disproportionate burden of air pollution on poor and
21 minority communities. These studies have helped focus
22 ARB's regulatory efforts where they are needed most near
23 roadways, ports and railyards. However, these studies
24 show pollution levels at a snapshot in time.

25 Our new study helps answer the question of

1 whether or not our collective regulatory efforts are
2 shrinking that disparity.

3 --o0o--

4 AIR RESOURCES SUPERVISOR I ALVARADO: Last year,
5 ARB staff published an article in a scientific journal
6 showing the trend in airborne cancer risk from 1990 to
7 2012. The study included the risks from car-related
8 pollutants and diesel PM, with diesel PM contributing the
9 most to cancer risk. On the chart, we see the diesel
10 exposure and cancer risk drop 68 percent at the same time
11 that the number of miles driven by diesel vehicles
12 increased 80 percent.

13 --o0o--

14 AIR RESOURCES SUPERVISOR I ALVARADO: While the
15 prior study showed that overall Californians are enjoying
16 improved air quality compared to 1990 levels. Today, we
17 ask the question of whether all communities are benefiting
18 equally.

19 To answer this question, we compared the 25 year
20 trends of diesel PM and several criteria pollutants, NO2,
21 carbon monoxide, PM2.5, and ozone in EJ and non-EJ
22 communities. To be clear, in this study, we are not
23 evaluating all exposures to all airborne pollutants in
24 specific communities. We are limited to the sites in our
25 monitoring network which are designed to characterize

1 maximum air pollution exposures at a regional level, not
2 from specific local sources.

3 Monitoring is certainly influenced by the
4 cumulative impacts of nearby sources, such as roadways,
5 oil refineries, power plants, and gas stations, but is not
6 designed to capture all neighborhoods and all near-source
7 exposures.

8 This study was designed to inform whether the
9 efforts to reduce emissions are also reducing the
10 disparity among communities.

11 --o0o--

12 AIR RESOURCES SUPERVISOR I ALVARADO: To answer
13 the question of whether all communities are benefiting
14 from statewide and local regulatory efforts, we use three
15 tools. First, we use the Environmental Justice Screening
16 Method, or EJSM, developed through an ARB research
17 contract. The EJSM formed the basis of CalEnviroScreen.
18 We use it in this study because it has an air pollution
19 focus, while CalEnviroScreen has more of a multi-media
20 focuses. I'll talk more about EJSM on the next slide.

21 Second, we use data California's monitoring
22 network operated by ARB and the local air districts. We
23 start the analysis in 1990 and 1999 for PM2.5 when the
24 current high quality measurement methods first went into
25 effect.

1 Third, because diesel PM is not measured
2 directly, we developed a peer reviewed method for
3 estimating its concentration using NOx measurements as a
4 surrogate adjusted with diesel PM and NOx emissions
5 inventories.

6 --o0o--

7 AIR RESOURCES SUPERVISOR I ALVARADO: The
8 Environmental Justice Screening Method assigns an EJ score
9 to each census tract in California, based on three map
10 layers. The first layer is social and health
11 vulnerability, which includes race/ethnicity, poverty and
12 linguistic isolation. The second layer is exposure and
13 risk, which includes airborne cancer risk, PM2.5, and
14 pesticide usage. And the third layer is hazard proximity,
15 which measures how close sensitive receptors like
16 residents, hospitals, and child care facilities are to
17 pollution sources.

18 The EJSM researchers developed this data for each
19 census tract. They computed an EJ score by ranking census
20 tracts within regions of California. The higher the
21 score, the more burdened the census tract.

22 --o0o--

23 AIR RESOURCES SUPERVISOR I ALVARADO: We relied
24 on an extensive network of air pollutant monitors from
25 1990 to 2014 with over 150 sites for each pollutant. We

1 calculated annual averages as the most robust indicator of
2 long-term trends and health effects for each pollutant.
3 And based on the census tracts surrounding each monitoring
4 site, we assigned an EJSM score to each monitor.

5 We then split the monitoring sites into the 20
6 percent most EJ burdened and the 20 percent least EJ
7 burdened by region, and we call that non-EJ. We average
8 all the EJ monitors together by year and all the non-EJ
9 monitors by year to get a year-by-year comparison of
10 monitors in the most and least burdened communities in
11 California.

12 --o0o--

13 AIR RESOURCES SUPERVISOR I ALVARADO: On this
14 slide, is the EJSM map of Southern California with the
15 location of all the monitoring sites used in our study.
16 The more reddish an area, the higher its EJSM score. The
17 monitors designated with a red dot are those located in
18 the 20 percent most burdened census tracts. The monitors
19 in blue are in the 20 percent least burdened census
20 tracts. The yellow dots are those census tracts that are
21 average levels of pollution, social and health
22 vulnerability, and proximity to hazards.

23 With dozens of monitoring sites in EJ
24 communities, we can evaluate whether they have higher air
25 pollution levels than other sites, and we can study trends

1 over time. As you can see from the map, the large
2 investment in the statewide network includes a wide
3 distribution of monitors in both EJ and non-EJ
4 communities.

5 --o0o--

6 AIR RESOURCES SUPERVISOR I ALVARADO: Here we see
7 the results for diesel PM. Each dot on the red line is an
8 average of all monitors in EJ communities for a given
9 year. And each dot on the blue line is an average of all
10 EJ -- of non-EJ monitors for a given year.

11 Over the 25-year study period, we see large
12 diesel PM reductions at sites throughout the state with
13 three times greater reduction at the EJ sites compared to
14 the non-EJ sites. We have made noteworthy progress in
15 narrowing the gap, but a disparity among EJ and non-EJ
16 sites remains that we must continue to address.

17 --o0o--

18 AIR RESOURCES SUPERVISOR I ALVARADO: Here, we
19 show the trend for NO2. Since diesel engines are the main
20 source of NOX emissions in California. It's not
21 surprising that NO2 follows the same pattern as diesel PM.
22 Again, the greatest reduction is at the EJ sites with
23 about two times greater reductions than the non-EJ sites.

24 --o0o--

25 AIR RESOURCES SUPERVISOR I ALVARADO: We observed

1 decreased diesel PM and NO2 everywhere with the greatest
2 reductions at EJ monitors.

3 Why?

4 ARB has implemented regulations and enforcement
5 aimed at local sources like roadways, ports, and
6 railyards. These are places where EJ activists have urges
7 to redouble our efforts. The ambient diesel PM trend
8 reflects a decline at the same time as ARB diesel PM
9 regulations come into effect.

10 First, reducing sulfur from diesel fuel in 1992,
11 and again in 2006, made immediate and large reductions in
12 diesel PM.

13 Second, the cleaner fuel enabled tailpipe
14 standards that require PM emissions from new trucks to
15 approach those from new cars. These tailpipe standards
16 for new vehicles resulted in gradual declines as the fleet
17 turns over.

18 Since diesel trucks can operate for many years.
19 In 2008, ARB adopted a truck and bus rule, which regulated
20 existing diesel trucks and buses for the first time. It
21 required the installation of PM filters and replacement of
22 older vehicles, depending on the nature and age of the
23 truck fleet. The requirements come into effect
24 incrementally between 2012 and 2023, with all trucks
25 requiring some form of control by 2016.

1 Diesel PM data shows a drop starting in 2012 and
2 continuing through -- until 2014, coincident with the
3 implementation and enforcement of the truck and bus rule.
4 We will continue to track diesel PM levels to see if they
5 decline as the rule is further implemented and the fleet
6 continues to turnover

7 --o0o--

8 AIR RESOURCES SUPERVISOR I ALVARADO: While
9 California meets all air quality standards for carbon
10 monoxide, it is a useful -- it is useful to look at this
11 pollutant as a marker for toxics and other pollutants
12 emitted from gasoline fueled vehicles.

13 As with diesel PM and NO2, we see that carbon
14 monoxide monitoring sites in EJ communities were
15 consistently higher than non-EJ sites, but levels have
16 gone down everywhere with a two times greater reduction in
17 EJ sites compared to non-EJ sites.

18 And in this case, we see the two lines converging
19 to the point where carbon monoxide levels are now roughly
20 the same for monitors located in the most and least
21 burdened communities.

22 --o0o--

23 AIR RESOURCES SUPERVISOR I ALVARADO: For carbon
24 monoxide, we observed concentrations increasing everywhere
25 with the greatest reductions at EJ monitors. And why do

1 we think this is happening? The carbon monoxide Ambien
2 measurements show a steady decline throughout the study
3 period, suggesting that there's a consequence of the
4 implementation of numerous regulatory strategies.
5 Starting before the study period, regulations that
6 impacted carbon monoxide emissions include the California
7 Smog Check program starting in 1984. Then reformulated
8 gasoline in '92, and again in 1996. The low emission
9 vehicle standards, or LEV, further lowered carbon monoxide
10 emissions.

11 Interestingly, by the year 2010, CO monitors in
12 both and EJ and non-EJ tracts measure equivalent levels of
13 CO. We think that this was the result of fleet turnover
14 in the most burdened communities. Based on remote sensing
15 data from one on-ramp in Los Angeles, in 2005 the percent
16 of pre-LEV vehicles was estimated to be 23 percent in EJ
17 census tracts compared to eight percent in non-EJ census
18 tracts. By 2013, the estimated gap had narrowed to six
19 percent in EJ tracts and three percent in non-EJ tracts.

20 This suggests that fleet turnover has replaced
21 older pre-LEV vehicles with LEV vehicles everywhere and
22 succeeded in reducing carbon monoxide and other tailpipe
23 standards in the most burdened communities.

24 --o0o--

25 AIR RESOURCES SUPERVISOR I ALVARADO: The last

1 two pollutants in this study PM2.5 and ozone. Both
2 pollutants are formed in the atmosphere from NOx,
3 hydrocarbons, and other precursors. Their formation
4 occurs regionally downwind of precursor emissions sources
5 and thus regulations to control precursors have an impact
6 regionally, not locally.

7 As we see on the graphs, both PM2.5 and ozone are
8 decreasing over the study period and they are decreasing
9 equally in the most and least burdened communities. The
10 lack of a downward trend for PM 2.5 in the last three
11 years may be the result of California's drought.

12 --o0o--

13 AIR RESOURCES SUPERVISOR I ALVARADO: In
14 conclusion, in some -- while some diesel and gasoline fuel
15 engines regulations preceded environmental justice
16 activism, environmental justice advocates have organized
17 to reduce pollution and near-roadway sources especially
18 diesel PM. The awareness and action they generated
19 resulted in joint efforts from community organizations,
20 academia, and government to address the issue with
21 regulations aimed at sources that are concentrated near
22 disadvantaged communities, including roadways, ports,
23 railyards in California, and elsewhere in the United
24 States.

25 In this study, we see the results of those

1 efforts. We find that pollutants with controls that
2 impacted near-source concentrations - diesel PM, NO2, and
3 carbon monoxide - had the greatest decreases at monitors
4 located in EJ census tracts.

5 The regional pollutants PM2.5 and ozone are
6 formed in the atmosphere far from sources and show similar
7 declines at monitors located both in EJ and non-EJ
8 communities.

9 There are many efforts to further reduce
10 emissions from pollutant sources, both regionally and
11 those concentrated near disadvantaged communities. With
12 continued phase-in of the truck and bus rule through 2023,
13 development of State implementation plans, and the
14 multi-agency efforts on sustainable freight, we expect
15 that the remaining disparities will continue to shrink and
16 we will continue to monitor progress.

17 --o0o--

18 AIR RESOURCES SUPERVISOR I ALVARADO: While this
19 study highlights the progress made towards environmental
20 justice, it also emphasizes the continued need to further
21 evaluate air pollution levels in the most burdened
22 communities and reduce overall exposure.

23 To this end, the air districts are currently
24 installing a near-roadway monitoring network with 12 sites
25 to track the progress of our motor vehicle control program

1 in reducing local exposures. In addition, ARB is
2 investing in enhanced monitoring of the oil and gas
3 sector, other greenhouse gas sources, and pesticides.
4 Many of these efforts will take place in EJ communities.

5 They are now satellite capabilities for PM2.5 and
6 a few other pollutants that can detect pollution hot
7 spots, complimented by networks of portable monitoring
8 devices and mobile monitoring platforms that are being
9 deployed in EJ communities around the State by ARB, and
10 other agencies, academics, and environmental justice
11 groups.

12 While this monitoring is not necessarily the same
13 quality as the official networks, it is very promising for
14 screening purposes and to help identify the responsible
15 sources.

16 Before ending the presentation, I want to
17 acknowledge Professors Manuel Pastor, Rachel
18 Morello-Frosch, and Jim Sadd as collaborators on this
19 study and developers of the environmental justice
20 screening method. They sent a letter in support of this
21 item.

22 In it, they reiterate that this study shows that
23 EJ remains and important issue, and progress is possible
24 when policymakers and communities work together to uncover
25 problems and develop effective solutions.

1 I look forward to your questions that you might
2 have on this study.

3 Thank you.

4 CHAIR NICHOLS: Thank you. The letter was
5 distributed to all of us at the beginning of this meeting.
6 And I see we have a couple of the authors with us. So
7 that's great.

8 Okay. Thank you. Questions comments?

9 Yes, Dr. Balmes, start with you.

10 BOARD MEMBER BALMES: Well, first off, I really
11 want to express my appreciation to the Research Division
12 for conducting this work, because I think it gives us some
13 confidence that we're -- our overall strategies are making
14 a difference for all of Californians, those in
15 disadvantaged communities, EJ communities, as well as
16 non-EJ communities. This is the fourth time I've heard
17 the presentation now, so I've been well briefed, and it
18 gets better each time.

19 (Laughter.)

20 CHAIR NICHOLS: Well, that's good.

21 AIR RESOURCES SUPERVISOR I ALVARADO: Thank you.

22 BOARD MEMBER BALMES: And I'm -- I know that
23 Alvaro and Bart are expecting to publish this along with
24 the co-authors from academia Manuel, Jim, and Rachel.

25 So I think overall there's a good message here,

1 and I like the fact that you're going to try to tweak this
2 in the future with better monitoring data and more
3 comprehensive monitoring data. So I look forward to
4 future presentations.

5 I guess one concern I have is that the -- I'm
6 going to make sure that I say it right. The Environmental
7 Justice Screening Method, again which I've known about for
8 some time, is used here, as you mentioned was used as the
9 basis for CalEnviroScreen, but it's different than
10 CalEnviroScreen, because it just focuses on air pollution
11 as the environmental exposure.

12 And I just worry about people getting confused
13 between this screening method and CalEnviroScreen. I
14 actually am more comfortable with screening method because
15 I understand the inputs for this better than I understand
16 the inputs for CalEnviroScreen. And I've had some concern
17 about that I've expressed to OEHHA.

18 So I guess that's my major concern is that we're
19 using one screening method, and I think it's totally
20 appropriate for our purposes, so I'm not being critical of
21 that. But another sister agency is using a different one.
22 And it's the CalEnviroScreen that's determining what are
23 disadvantaged communities with regard to greenhouse gas
24 revenues.

25 I actually would be more comfortable with

1 Environmental Justice Screening Method being used to
2 determine those disadvantaged communities, but, you know,
3 that's, I guess, above my pay grade.

4 (Laughter.)

5 BOARD MEMBER BALMES: So that's my major concern.

6 AIR RESOURCES SUPERVISOR I ALVARADO: Yeah.

7 While, the EJSM is mostly air pollution focused and
8 CalEnviroScreen is mostly multi-media focused, we did do a
9 sensitivity analysis to see if we got similar results with
10 CalEnviroScreen. And the results are obviously not going
11 to be exactly the same, but they're consistent.

12 BOARD MEMBER BALMES: Well, thank you. I was
13 just going to ask you to do that, but I decided I could do
14 that not from the dais. I was just going to do that
15 privately. So thank you. That's what I wanted to hear.

16 AIR RESOURCES SUPERVISOR I ALVARADO: I figured
17 somebody would ask.

18 CHAIR NICHOLS: I think it would be surprising if
19 it wasn't.

20 BOARD MEMBER BALMES: Well, you know, there's
21 pesticide exposure and water quality issues --

22 CHAIR NICHOLS: True.

23 BOARD MEMBER BALMES: -- that are inputs for
24 CalEnviroScreen that aren't inputs here. So, to me, this
25 is cleaner, because it's not mixing apples and oranges.

1 CHAIR NICHOLS: Yeah. I think maybe it's just
2 that our data overwhelmed all the other data.

3 (Laughter.)

4 BOARD MEMBER BALMES: I think that's likely to be
5 true.

6 CHAIR NICHOLS: Okay. Other comments. Yes.

7 BOARD MEMBER TAKVORIAN: Yeah, that's a whole
8 conversation that would be interesting to have. I would
9 say that I thought it was a good use of EJSM, which I've
10 been familiar with, and we had the opportunity to do
11 ground-truthing with EJSM locally with community
12 residents, and hopefully improved it a bit, but it was
13 really good to start with.

14 And one of the things that I think is important
15 is that it includes proximity, which CalEnviroScreen does
16 not in quite the same way. So I think it's important
17 to -- it's great that we have both the tools really. And
18 I guess I would just thank Alvaro and your team for the
19 work that you all have done. I think it's really
20 important for us to take a look at it. And plus, I really
21 appreciate the acknowledgement that the rules and the regs
22 really are making a difference. And I think we can take
23 heart from that, and know that we're on the right track,
24 and also know that we're not there yet, that we -- there's
25 a lot more work to do, and that the laws that have come

1 into place in the last 10 to 15 years, particularly around
2 environmental justice, have really started to make, I
3 think, a difference, and the work of this agency has
4 really made a difference, but the gap is still there, and
5 so we appreciate the work that the agency will do going
6 forward.

7 And one specific question I'm forgetting. But I
8 think that that's good. Thank you so much.

9 CHAIR NICHOLS: Okay. Well, I think that may be
10 the conclusion then. Thank you so much. It's very
11 helpful to hear this report and know the progress that's
12 being made, so thank you.

13 Our last item of the day is the presentation of
14 our current version of the concepts for the scoping plan.
15 It's a plan to scope a scoping plan I guess you might say.

16 (Laughter.)

17 CHAIR NICHOLS: I mean, it's -- there's a lot of
18 thinking that's gone into it, but the level of generality
19 obviously is still pretty high, but I think that's
20 necessary in order to gather the kind of input that we
21 need and really to have the time to test out some of the
22 ideas that people have about how we could improve the
23 overall effectiveness our climate efforts.

24 So we are under a -- under a mandate to produce a
25 new scoping plan. We are currently on track to meet our

1 2020 target, which seems like it's right around the
2 corner, and we only started working on it just a few days
3 ago. But, in fact, we are well down the road towards
4 meeting the target that was adopted in 2020 that
5 represents a return to 1990 emissions levels for the State
6 of California, which was and is a challenging milestone in
7 and of itself, given the growth that has occurred in
8 California both in our population and in our economy
9 during this period of time.

10 And we've learned a lot along the way and
11 fine-tuned many of the concepts. So this new version
12 focused on the 2030 goal is a chance to reflect that
13 learning and to refocus our activities.

14 The State, as a whole, not only through the
15 scoping plan, but efforts of many other agencies, has
16 developed an energy -- set of energy policies that are
17 helping to decarbonize all of our energy systems and our
18 industries. And the data that have come in, particularly
19 within the last year, indicate that California's economy
20 has rebounded from the Great Recession, and, in fact, is
21 now leaping ahead of other regions.

22 And while we can't claim that AB 32 is the cause
23 of that, we can at least say that this growth has been
24 occurring in parallel with our implementation AB 32, and
25 that it demonstrates that a very progressive and active

1 program to address the need to reduce overall carbon
2 emissions is not inconsistent with growth in the economy
3 and overall quality of life. So this is good news.

4 The first update to the scoping plan, which this
5 Board adopted in 2014, was built upon the original scoping
6 plan, and it continued all of the programs in effect and
7 added some new ones. Now, that we are focused on the
8 goal, which the rest of the world is also looking at as a
9 result of the Paris agreement, of a much more -- a much
10 more ambitious 2030 target based on the science that has
11 indicated that we need to make more drastic changes
12 overall around the world, it's an opportunity to look at
13 some of the sectors that we have identified, but hadn't
14 really worked on before. And that's particularly true in
15 the area of natural resources and forestry water, areas
16 that are integral to our economy and well-being as a
17 state, but that don't -- had not previously been able to
18 be translated into really specific climate-related
19 measures.

20 This time around I think we need to, again not
21 just focused on reducing greenhouse gas emissions, but
22 really speak in a more explicit way about sustainability
23 and how reducing greenhouse gas emissions overall is apart
24 of a plan to make our State more sustainable.

25 So this is a long-term venture that we're

1 embarked on, but we've had tremendous support in this
2 effort from our Governor who continually returns to these
3 issues as being at the heart of his legacy, and more just
4 than a legacy really of his belief about what California
5 has to offer to the world, and what makes us a place that
6 people around the world look to for leadership on issues
7 of fundamental importance to our civilization.

8 So with that, I think I should turn this over to
9 Mr. Corey and we'll hear the staff presentation. This is
10 just an informational item. We're not being asked to take
11 action, but I think it's an opportunity for the Board and
12 others to weigh in on some of the things that we should be
13 thinking about as we move forward.

14 All right.

15 EXECUTIVE OFFICER COREY: Thanks Chair Nichols.

16 As envisioned in the initial AB 32 scoping plan,
17 the State has implemented a comprehensive -- comprehensive
18 suite of strategies across sectors that are moving
19 California toward a low carbon future. The State has made
20 tremendous strides increasing our renewable energy use,
21 and increasing energy efficiency thus saving billions in
22 reduced electricity costs.

23 Each day, renewable fuels, with the help of a Low
24 Carbon Fuel Standard, are displacing more gasoline and
25 diesel. California's pioneering zero emission vehicle

1 regulation is driving a transformation of the State's
2 vehicle fleet. And California is also making strides
3 towards reducing the number of vehicles that are driven --
4 or rather miles driven through more sustainable
5 transformation, transportation, land use, and housing
6 planning.

7 And the State has also developed the most
8 comprehensive Cap-and-Trade Program in the world, sending
9 a clear signal that investment in clean low carbon
10 technologies will be rewarded. So collectively, these
11 actions are evidence of California's ability to show that
12 it has -- it's possible to break the historical connection
13 between economic growth and associated increases in energy
14 demand, combustion of carbon intensive resources, and
15 pollution.

16 And we also know that preventing the worst
17 impacts of climate change will require accelerated
18 development and diffusion of these technologies, not just
19 in California, but across the world. We must continue to
20 take bold actions that will provide greater public health
21 and increasing economic benefits for Californians and
22 continue to serve as a model for other states and nations
23 to follow.

24 So the 2030 update to the scoping plan will build
25 on the success that we've experienced to date a suite of

1 policies to help ensure California meets its ambitious
2 climate goals over the next 15 years and beyond. And with
3 that, I'm going to ask Stephanie Kato to give the staff
4 presentation.

5 Stephanie.

6 (Thereupon an overhead presentation was
7 presented as follows.)

8 AIR POLLUTION SPECIALIST KATO: Thank you, Mr.
9 Corey. Good afternoon, Chair Nichols, Vice Chair Berg,
10 and members of the Board. The focus of this presentation
11 is to provide the Board with an update on the progress to
12 date, upcoming activities, and current schedule to update
13 the scoping plan to map out a strategy to meet the 2030
14 greenhouse gas emission reduction targets set by
15 Governor's Executive Order B-30-15.

16 --o0o--

17 AIR POLLUTION SPECIALIST KATO: For this
18 presentation, I will start with a summary of the scoping
19 plan development activities we have completed to date. A
20 scoping plan concept paper was made available for public
21 review and comment last Friday. After providing the
22 summary of activities to date, the remaining majority of
23 my presentation will focus on highlighting content in the
24 concept paper.

25 I will provide information on the framing for

1 this scoping plan, which at the highest level, seeks to
2 map out a comprehensive approach that incorporates
3 multiple ongoing State efforts. I will summarize recent
4 updates to ARB's greenhouse gas emission inventory. I
5 will discuss the results of a draft business-as-usual
6 reference scenario that helps define the amount of
7 greenhouse gas reductions needed between now and 2030 to
8 achieve the target; and, at a high level, provide current
9 progress towards identifying the policies and measures to
10 include in the approach to achieve the 2030 target.

11 Lastly, I will share a tentative schedule for
12 regional workshops, technical workshops, and release of
13 documents ahead of future Board meetings for consideration
14 of the draft and final scoping plan.

15 --o0o--

16 AIR POLLUTION SPECIALIST KATO: This scoping plan
17 update is in response to Executive Order B-30-15. The
18 order issued by Governor Brown establishes a 2030
19 statewide greenhouse gas emissions reduction target of 40
20 percent below 1990 levels. The order also directs ARB, in
21 coordination with sister State agencies, to update this
22 scoping plan to chart the path towards achieving the 2030
23 target and put the State on the path to achieving the 2050
24 reduction target of 80 percent below 1990 levels.

25 --o0o--

1 AIR POLLUTION SPECIALIST KATO: Similar to
2 previous efforts, the 2030 target scoping plan update is
3 being developed in an open and transparent manner
4 involving coordination with State agencies, engagement
5 with the legislature, consultation with the Environmental
6 Justice Advisory Committee, and multiple opportunities for
7 stakeholders and the public to engage in the process
8 through workshops and other meetings.

9 ARB staff will prepare and present an
10 environmental analysis as required under the California
11 Environmental Quality Act, as well as public health
12 analysis. I also want to emphasize that the scoping plan
13 is being closely coordinated with other State agency
14 plans, including the Clean Power Plan, the State
15 Implementation Plan, the Sustainable Freight Strategy, and
16 the Short-Lived Climate Pollutant Reduction Strategy among
17 others.

18 The scoping plan will integrate and provide a
19 comprehensive picture on how each of these plans fits
20 together within the State's broader efforts to improve air
21 quality and reduce greenhouse gases.

22 --o0o--

23 AIR POLLUTION SPECIALIST KATO: While we are
24 continuing to work on the entire suite of measures, that
25 will be included in the 2030 target scoping plan update,

1 Regional and local governments are also leaders
2 in addressing climate change and are uniquely positioned
3 to reduce emissions. Many local governments have already
4 initiated efforts to reduce greenhouse gases beyond those
5 required by the State.

6 Local governments can play an important role in
7 achieving the State's long-term greenhouse gas goals,
8 because they have broad influence over activities that
9 contribute to significant direct and indirect greenhouse
10 gas emissions. This includes their planning and
11 permitting processes, discretionary actions, local
12 ordinances, outreach and education efforts, and municipal
13 operations.

14 Local government efforts to reduce emissions
15 within their jurisdiction also provide important
16 co-benefits, including improved air quality, local
17 economic benefits, more sustainable communities, and an
18 improved quality of life.

19 Local actions are critical for implementation of
20 California's ambitious climate agenda. Local municipal
21 code changes, zoning changes, or policy directions that
22 apply broadly to the community within the general plan or
23 Climate Action Plan area can help promote the deployment
24 of renewable, zero emission, and low carbon technologies
25 such as zero net energy buildings, renewable fuel

1 production facilities, and zero emission charging
2 stations.

3 ARB staff is currently exploring the potential to
4 identify lists of actions that local governments can take
5 within each economic sector. The local agencies may be
6 able to use that information as a basis for local climate
7 action plans, general plans, and developing
8 performance-based significance thresholds for CEQA.

9 At the State level, California is not alone.
10 Today, the State's Cap-and-Trade Program is linked with
11 Quebec's program. Ongoing discussions to Link with
12 Ontario's Emerging Emissions Trading System are underway.

13 Low carbon fuel mandates, similar to California's
14 Low Carbon Fuel Standard, have been adopted by the U.S.
15 EPA and by other jurisdictions, including British
16 Columbia, the European Union, and the United Kingdom.

17 Over two dozen states have a renewable portfolio
18 standard. California can continue its leadership role and
19 partnerships to support action around the world.

20 --o0o--

21 AIR POLLUTION SPECIALIST KATO: The 2030 target
22 scoping plan update will include an economic analysis,
23 which will evaluate the economic impact to California of
24 achieving the 2030 emission reduction target.
25 Specifically, the analysis will evaluate the economic

1 impact of the various technology pathways and technologies
2 included in the scoping plan, as well as their use and
3 adoption in the State, their costs, and the potential
4 savings they may produce.

5 The economic analysis will also include the
6 economy-wide interactions of carbon pricing, as well as an
7 assessment of the potential impacts to California
8 businesses and residents. In order to ensure a robust
9 economic analysis, we have established a group of expert
10 peer reviewers who are serving in an advisory capacity in
11 the assessment of the economic impacts of the scoping
12 plan.

13 The core group is comprised of five reviewers
14 from UC Davis, UC Berkeley, and MIT that have experience
15 in California climate and air pollution policy, energy
16 markets and modeling, transportation and fuels, and power
17 systems and energy efficiency. Additional input may be
18 sought for expertise in other areas such as the natural
19 and working lands sector.

20 The purpose of the expert review group is to
21 assist ARB by providing expert advice, review and input on
22 various topics, including economic and macroeconomic
23 impacts, the technology pathways that will be considered,
24 assumptions and inputs to the PATHWAYS and REMI models,
25 translation of costs and savings between models, carbon

1 prices and monetized costs and savings, and interpretation
2 of model results.

3 --o0o--

4 AIR POLLUTION SPECIALIST KATO: AB 32 directs ARB
5 to convene an Environmental Justice Advisory Committee, or
6 EJAC, to advise the Board on a scoping plan. The first
7 EJAC was appointed in 2007 to advise development of the
8 original 2008 scoping plan, and reconvened in 2013 to
9 advise it on the first update.

10 For the 2030 target update, the 13-member EJAC is
11 again advising ARB on the plan. As you may recall, last
12 September, the Board approved the appointment of new
13 members from the Inland Empire, Bay Area, and Sacramento
14 to fill EJAC vacancies from former members that left their
15 positions. To date, the EJAC has held eight public
16 committee meetings in Sacramento, San Bernardino, Brawley,
17 and El Monte.

18 The EJAC has been receiving updates from scoping
19 plan staff on potential measure concepts for the 2030
20 update, and is finalizing their initial list of draft
21 recommendations for agency consideration. ARB staff is
22 working closely with the EJAC and sister agencies to
23 convene multiple community meetings in various locations
24 statewide over the next couple of months. These meetings
25 seek to provide education and outreach on State programs

1 with the focus on those that inform the scoping plan, hear
2 from community members on their priorities and needs, and
3 build lasting partnerships for future engagement on State
4 climate policies.

5 The committee has and will continue to conduct
6 public discussions on the development of the 2030 target
7 scoping plan update. All EJAC meetings are public and
8 include the opportunity for interested stakeholders to
9 provide comments and ask questions. I would like to point
10 out that we have a member of the EJAC with us here today
11 who will be providing oral comments.

12 --o0o--

13 AIR POLLUTION SPECIALIST KATO: This slide recaps
14 our public process for the scoping plan to date, which
15 started with the Governor's pillars workshops last summer,
16 and the first kick-off workshop held in September on
17 October 1, 2015. The multi-agency kick-off workshop was
18 co-hosted by the California Environmental Protection
19 Agency, California State Transportation Agency, California
20 Energy Commission, California Public Utilities Commission,
21 California Natural Resources Agency, California Department
22 of Food and agriculture, Air Resources Board, and the
23 Governor's Office of Planning and Research. And it
24 provided our sister agencies with the opportunity to share
25 their near and long-term visions for the State, and also

1 provided an additional opportunity for public engagement,
2 comments, and questions.

3 As I mentioned, the EJAC has met to discuss
4 scoping plan development and potential recommendations in
5 eight public meetings from last December through this
6 month. The economic advisor process and greenhouse gas
7 modeling efforts were introduced in January of this year
8 at a public workshop.

9 In March and April of this year, ARB staff held
10 sector-focused public workshops on natural and working
11 lands and agriculture in Sacramento and Fresno in
12 conjunction with the California Environmental Protection
13 Agency, California Natural Resources Agency, California
14 Department of Food and Agriculture, Governor's Office of
15 Planning and Research, and the California Strategic Growth
16 Council.

17 Each of these engagements has included either
18 informal or formal public comment periods. Written
19 comments, in addition to oral comments, heard at workshops
20 are being considered as we continue to develop the 2030
21 target scoping plan. As I will discuss later, there is an
22 opportunity to provide formal comments on the concept
23 paper, as well as more opportunities for public engagement
24 during the scoping plan development process.

25 --o0o--

1 AIR POLLUTION SPECIALIST KATO: As we chart a
2 path to achieve the 2030 and 2050 greenhouse gas targets,
3 we must develop a plan to meet the 2030 target, but we
4 must also take a holistic approach that is more than
5 merely the sum of its sectors. A comprehensive approach
6 accounts for interactions across sectors instead of
7 treating each sector as a siloed track. Efforts, such as
8 the Mobile Source Strategy, Sustainable Freight Plan,
9 California Transportation Plan 2040, and goals for the
10 natural environment can complement each other.

11 When examined together, they provide insights
12 into the trade-offs of policies across sectors until a
13 larger story about how the State will move towards a
14 sustainable future. This scoping plan can help identify
15 the policy choices that minimize costs and optimize
16 win-win solutions, while recognizing that it is difficult
17 to accomplish all State goals at the same time.

18 Actions and tools recommended by the scoping plan
19 must include a flexible framework for implementation.
20 Combinations of regulations, incentives, voluntary action,
21 private-public partnerships, and support from
22 non-governmental organizations can be leveraged to promote
23 desired actions. And achieving our goals requires a
24 structural shift in the global economy, which is already
25 underway.

1 Successfully driving this transition will require
2 cleaner and more efficient technologies, new policies, and
3 incentives that better recognize and reward innovation and
4 prioritize low carbon investments. This scoping plan will
5 identify new ways to promote the technologies and
6 infrastructure required to meet our climate goals, while
7 also presenting a vision for California's continuing
8 efforts to foster a clean energy economy.

9 Natural and working lands are integral to our
10 climate strategy. Storing carbon in trees, plants,
11 aquatic vegetation, and in soil is one of the most
12 effective ways to remove greenhouse gases from the
13 atmosphere.

14 This scoping plan will include policies and
15 programs that prioritize protection and enhancement of the
16 State's landscapes. The plan will build off ongoing
17 efforts to identify targets for natural and working lands,
18 such as the Forest Carbon Plan. Climate change is already
19 impacting the health of our communities, with those facing
20 the largest health inequities being residents of
21 disadvantaged communities. The capacity for resilience is
22 driven significantly by living conditions and the forces
23 that shape them, including income, education, housing,
24 transportation, environmental quality, and access to
25 services such as health care, healthy foods, and clean

1 water.

2 Addressing climate change presents a significant
3 opportunity to improve public health. Promoting a low
4 carbon economy will reduce greenhouse gas emissions and
5 create a healthier environment for all Californians,
6 especially those living in disadvantaged communities.

7 The scoping plan will include a public health
8 assessment that will discuss key statewide climate
9 mitigation measures and their potential impacts on public
10 health, especially co-benefits, such as the reduction of
11 criteria and toxic air pollutants.

12 Sound science underpins and strengthens climate
13 policy. This scoping plan will identify policies based on
14 solid science, and identify additional research needs.
15 Sectors, such as natural and working lands, have very
16 complex biological systems. While we have made
17 significant progress in understanding the role forests
18 play in climate mitigation, ongoing research to better
19 understand those and other systems will allow additional
20 opportunities to set targets and identify actionable
21 policies.

22 While this update is focused on 2030, we must
23 also consider policies needed for the long term, knowing
24 that some of those policies must begin implementation now.
25 At the same time, we must consider policies for 2030 that

1 produce waste wood for disposal.

2 This can be left in piles or burned in place, but
3 this produces the short-lived climate pollutants black
4 carbon and methane. We should evaluate other uses, such
5 as community-scale bioenergy production and biofuels that
6 displace petroleum and other fossil fuels, and associated
7 transportation emissions, and create new businesses and
8 jobs in rural communities. The same can be said for
9 organic waste produced in agricultural settings.

10 Similarly protecting land from development will
11 not only ensure that land can continue to take carbon
12 dioxide out the atmosphere each year, it will also pay
13 dividends in terms of supporting development patterns that
14 require residents to drive less reducing associated fuel
15 use. And growing the urban forest, planting trees as well
16 as pursuing other green infrastructure opportunities in
17 both urban and rural communities, will provide the shade
18 needed to reduce building energy use for cooling and make
19 active transportation more attractive.

20 We'll need to identify and pursue these feedback
21 loops in a coordinated fashion across agencies and
22 industries to hit our 2030 and 2050 targets. We plan to
23 use the scoping plan to refine these synergies and
24 integrated strategies to pursue pathways for technologies
25 that yield cross-sector, emission-cutting benefits.

1 --o0o--

2 AIR POLLUTION SPECIALIST KATO: The next portion
3 of this presentation focuses on ARB's existing greenhouse
4 gas emission inventory. The inventory is published by the
5 ARB annually. It provides a time series for tracking
6 emission trends. In 2006, AB 1803 gave ARB the
7 responsibility to develop and maintain a statewide
8 greenhouse gas inventory. The inventory follows the
9 guidelines of the Intergovernmental Panel on Climate
10 Change, or IPCC, to estimate the amount of greenhouse
11 gases emitted to the atmosphere by human activities within
12 California.

13 Following IPCC guidelines ensures consistency and
14 comparability with other national inventories. This is
15 important because consistency and comparability provide a
16 foundation for California to participate in climate change
17 dialogues at the national and international level.

18 AB 32 provided additional instruction to
19 greenhouse gas inventory compilation. It explicitly named
20 seven greenhouse gases. The original AB 32 text in 2006
21 included only six, the so-called Kyoto Protocol gases.
22 Nitrogen trifluoride was later added in 2009 when SB 104
23 amended AB 32 to include the seventh gas.

24 AB 32 also specified that California needs to
25 track emissions from imported electricity generated

1 outside of the State. This expands the inventory beyond
2 the typical boundary of the IPCC inventory framework,
3 which extends -- excuse me, which ends at the national
4 borders, or in California's case, would be the State
5 borders.

6 In addition, AB 32 instructs ARB to quantify
7 California's historical greenhouse gas emission level in
8 1990, which became the 2020 emission limit that California
9 must achieve.

10 --o0o--

11 AIR POLLUTION SPECIALIST KATO: Starting with the
12 2014 greenhouse gas inventory, ARB has implemented some
13 updates consistent with IPCC guidelines. The two most
14 significant updates include, first, reclassification of
15 carbon dioxide from combustion of transportation biofuels
16 as biogenic carbon dioxide. These emissions will continue
17 to be tracked as separate informational line items in the
18 inventory. Consistent with IPCC guidelines, the biofuel
19 carbon dioxide reclassification is applied to the entire
20 inventory time series from 2000 to 2014 to maintain a
21 consistent inventory time series.

22 Second, reclassification of petroleum seeps as
23 excluded emissions. Petroleum seeps are a natural
24 emission source. IPCC guidelines do not identify
25 petroleum seeps as an emission source to be quantified,

1 nor are they included in the U.S. EPA's National
2 Greenhouse Gas Inventory. Like biofuels, petroleum seeps
3 emissions will continue to be accounted for as a separate
4 informational item in the inventory.

5 Since transportation biofuel volumes were
6 negligible and petroleum seeps emissions were very small
7 in 1990, the reclassification of the these emissions has a
8 negligible impact on 1990 emissions and the 2020 target.

9 --o0o--

10 AIR POLLUTION SPECIALIST KATO: California has
11 made progress toward achieving the 2020 target while
12 supporting economic growth. California currently ranks as
13 the world's sixth largest economy for 2015. And as shown
14 in the graph, in 2014, total greenhouse gas emissions
15 decreased by 2.8 million metric tons of carbon dioxide
16 equivalent compared to 2013, representing an overall
17 decrease of 9.4 percent since peak levels in 2004.

18 The 2014 inventory includes the improved
19 methodology updates. The inventory data shows the
20 portfolio programs that the State is currently employing
21 to reduce greenhouse gases and achieve the 2020 target is
22 working.

23 --o0o--

24 AIR POLLUTION SPECIALIST KATO: As we examine the
25 data from AB 32 programs and the sources of data used in

1 the emission inventory, we have begun discussing whether
2 an alternate framework would more effectively track the
3 benefits of AB 32 programs. Such a framework would be
4 built upon the existing emission inventory, but could
5 introduce new data sources or methods.

6 It is important to note that in any case, the
7 existing emission inventory will be maintained for
8 consistency with international and national inventories,
9 as well as to maintain a time series for tracking emission
10 trends.

11 As we look forward, we are evaluating how the
12 bottom-up data from our AB 32 programs could be used to
13 refine the inventory numbers to more accurately reflect
14 the impacts of these programs. There is a broader
15 discussion at the international level on how accounting
16 frameworks, such as those for linked trading programs
17 could account for flows of compliance instruments across
18 international boundaries.

19 Similarly, the Low Carbon Fuel Standard includes
20 data to estimate the land-use impacts to greenhouse gases
21 associated with the production of biofuels. Our aim is to
22 consider an accounting framework that is transparent and
23 offers the most effective perspective for the purpose of
24 tracking AB 32 program progress.

25 Just as importantly, the exchange of carbon

1 dioxide between the atmosphere and natural and working
2 lands is not currently quantified and is not included in
3 the inventory, but is essential for monitoring land-based
4 activities that may increase or decrease carbon
5 sequestration over time.

6 ARB staff is working with other State agencies,
7 nonprofit organizations, and research institutions to
8 develop an inventory of greenhouse gas fluxes from all of
9 California's natural and working lands using IPCC design
10 principles. The scoping plan will describe our progress
11 and identify any gaps.

12 --o0o--

13 AIR POLLUTION SPECIALIST KATO: To chart the path
14 towards the 2030 target, we first need to understand the
15 amount of greenhouse gas reductions needed between now and
16 2030. This is best understood by first modeling the
17 reference case, also referred to as "business as usual",
18 which extends today's existing programs to 2030 to
19 estimate future emission levels.

20 ARB staff held a workshop in January with Energy
21 and Environmental Economics on the PATHWAYS model, and
22 discussed the parameters for a reference case. Since
23 then, modeling results for a draft reference scenario have
24 been generated that include the updated methodology for
25 estimating biofuel supplies. The results are depicted in

1 the next slide. Staff is currently soliciting feedback on
2 the appropriateness of the assumptions used in developing
3 the reference case

4 --o0o--

5 AIR POLLUTION SPECIALIST KATO: This graph shows
6 that the State is expected to achieve the 2020 target, but
7 additional effort is needed to maintain and continue
8 greenhouse gas reductions to meet the 2030 midterm target
9 and 2050 long-term target. This gives us an indication of
10 the magnitude of the challenge we face in the scoping plan
11 process to develop a set of emission reduction measures
12 that can contribute to and achieve the 2030 goal, while
13 ensuring the State is on a path towards achieving the 2050
14 target.

15 These modeled results in the trends seen in the
16 greenhouse gas inventory demonstrate that the current
17 suite of greenhouse gas reduction measures is working as
18 expected, while the economy has continued to grow.

19 --o0o--

20 AIR POLLUTION SPECIALIST KATO: In mapping out
21 the path to achieve the 2030 target, it is important to
22 understand the sources of emissions when considering the
23 policies and programs to reduce greenhouse gases. The pie
24 chart provides the percent Contribution to statewide
25 emissions from the main economic sectors as reflected in

1 the 2014 emission inventory.

2 Climate mitigation policies must be considered in
3 the context of the sector's contribution to the State's
4 total greenhouse gas emissions. Transportation,
5 electricity, and industrial sectors are the largest
6 contributors and present the greatest opportunities.

7 However, to ensure decarbonization across the
8 entire economy, policies must be considered for other
9 sectors as well, because over time they will contribute a
10 larger fraction of the State's greenhouse gases.

11 The challenge before us is to identify what
12 additional policies or program enhancements we need to
13 achieve the remaining amount of greenhouse gas reductions
14 in a complementary, flexible, and cost effective manner to
15 achieve the 2030 target. These policies should continue
16 to encourage reductions beyond 2030 to keep us on track to
17 stabilize climate.

18 Policies that ensure economy-wide investment
19 decisions that incorporate consideration of greenhouse gas
20 emissions are particularly important. At the same time,
21 we need to acknowledge the integrated nature of our built
22 and natural environments. In this scoping plan, each of
23 the policies directed at the built environment must be
24 weighed against the high level goals for the natural and
25 working lands sector.

1 --o0o--

2 AIR POLLUTION SPECIALIST KATO: Staff does not
3 expect the known plans and measures to achieve all of the
4 reductions needed for the 2030 target. That means the
5 focus of this scoping plan then shifts to identify how
6 best to reduce the remaining emissions and achieve the
7 target. Options include enhancing and extending existing
8 programs, new programs, or prescriptive regulations in
9 various sectors.

10 We are already seeing evidence that our current
11 policies are working. And because of that, at this time,
12 the staff preferred option to address the remaining
13 emissions and achieve the 2030 target is the Cap-and-Trade
14 Program with declining caps.

15 As part of the development of this scoping plan,
16 staff will review and evaluate other options comparing
17 them with the scoping plan objectives that I outlined
18 earlier. The impacts and benefits, as well as associated
19 costs, of those options will need to be evaluated to help
20 determine which policies will comprise the preferred path
21 forward.

22 --o0o--

23 AIR POLLUTION SPECIALIST KATO: In the coming
24 months, there will be additional opportunities for public
25 and stakeholder engagement for scoping plan development.

1 We are currently taking comments on the content of this
2 scoping plan concept paper and overall strategy
3 development. ARB staff will hold additional
4 sector-specific workshops to hear stakeholder feedback on
5 scenario modeling, measures to close the gap, the scope of
6 the environmental analysis, and other related topics to
7 inform the scoping plan.

8 ARB staff will also continue to hold additional
9 technical workshops over the next few months on the
10 economic analysis. ARB staff is also working with the
11 California Department of Public Health, and we will
12 continue our ongoing collaboration and coordination with
13 their staff on the public health analysis for this scoping
14 plan.

15 As I mentioned earlier, ARB staff is coordinating
16 with the EJAC to hold several community meetings
17 throughout the State over the next two months to get
18 neighborhood level feedback on existing programs and
19 future initiatives to support scoping plan goals and also
20 understand the needs, priorities, and expectations of
21 affected communities.

22 And as always, ARB staff is available to meet
23 individually with stakeholders, as requested, to discuss
24 not only ideas for broader strategies, but specific issues
25 as well.

1 --o0o--

2 AIR POLLUTION SPECIALIST KATO: Regarding the
3 schedule going forward, ARB staff will hold the additional
4 sector-specific workshops in conjunction with sister
5 agencies in the coming summer months. ARB staff will also
6 continue to hold additional technical workshops over the
7 next few months on the economic analysis. We anticipate
8 that the draft 2030 target scoping plan, including the
9 full environmental and economic analyses, will be ready in
10 late summer 2016.

11 After release of the draft, ARB staff will hold
12 regional workshops in the Bay Area, Los Angeles, the
13 Central Valley, and other areas as needed to ensure a
14 robust public process. The draft scoping plan will be
15 accompanied by an informal 45-day public comment period.
16 Staff will also provide formal written responses to
17 comments received on the draft and final environmental
18 analyses that accompany this scoping plan.

19 --o0o--

20 AIR POLLUTION SPECIALIST KATO: ARB staff is
21 requesting that stakeholders please provide comments on
22 the scoping plan concept paper by July 8, 2016 at 5:00
23 p.m. Links to submit both written comments and view all
24 comments received can be found on ARB's scoping plan
25 website at the URL listed on this slide.

1 I would like to emphasize again that additional
2 opportunities to provide comments on scoping plan
3 materials will be available at upcoming workshops.

4 This concludes my presentation. We would be
5 happy to answer any questions the Board may have at this
6 time, but first I would like to invite the representative
7 from the Environmental Justice Advisory Committee to come
8 up and provide comments.

9 MS. VALENZUELA GARCIA: Hello, and thank you for
10 this special order. I was worried when my name wasn't on
11 the list for public comment.

12 My name is Katie Valenzuela Garcia. I'm one of
13 the co-chairs of your Environmental Justice Advisory
14 Committee. And I've been elected by my colleagues to give
15 you an update on our status for the 2030 scoping plan
16 development.

17 Two days ago, the EJAC finalized and initial set
18 of recommendations. These recommendations are not final,
19 but are meant to provide initial guidance to staff on key
20 issues or opportunities the EJAC would like to be
21 addressed in the scoping plan. Our recommendations are
22 based on thorough review of staff materials, practices and
23 policies to date, best practices in research in our fields
24 of work, as well as feedback from our local partners.

25 While many of our recommendations are within

1 ARB's authority, some are not. And as Stephanie
2 mentioned, implementation of AB 32 involves local
3 jurisdictions and other State agencies as well, and we
4 would like to see that guidance included in the scoping
5 plan more directly.

6 We see in our communities many opportunities to
7 further strengthen AB 32 implementation to ensure all
8 communities benefit from our policies and investments, and
9 feel that addressing many of these opportunities as
10 possible will be critical to us reaching our ambitious
11 2030 targets.

12 Since our recommendations are over 10 pages long,
13 I won't read them to you today, but I do ask that staff
14 circulate that to you when they're ready for circulation,
15 which should be in the next week or so.

16 Our next step as mentioned is to provide a robust
17 round of community workshops and to educate our neighbors
18 on the scoping plan while also collecting important
19 feedback on their priorities, concerns, and definitions of
20 success for the 2030 target scoping plan. We're excited
21 to be getting such tremendous support from ARB staff and
22 our contractors for this process, and hope that the
23 products of this outreach will directly inform our next
24 round of recommendations later this summer.

25 It is our hope also that this engagement process

1 will set a model for what ARB can be doing in future
2 rounds of public outreach for other plans and rule-making
3 activities.

4 Now, before I conclude, I would like to raise one
5 concern that arose after a brief presentation on the
6 scoping plan given at our meeting earlier this week. It
7 has been our understanding that while the overall process
8 started in October of last year, the draft rule for cap
9 and trade beyond 2020 would not be released until 2017 to
10 allow time for the 2030 target scoping plan to be
11 completed.

12 That understanding was confirmed when I looked
13 back to staff's slide show presentations from Clean Power
14 Plan and cap and trade workshops last fall and earlier
15 this year. However, during our meeting this week, staff
16 said that the draft rule would be released this summer,
17 and would be adopted by the Board at the same time or
18 shortly after you vote on the 2030 Target Scoping Plan.

19 We find it concerning that the process to extend
20 cap and trade beyond 2020 would be so significantly
21 underway before we've made substantial progress on the
22 2030 Target Scoping Plan, as part of that plan is to
23 analyze whether and how cap and trade might continue,
24 which should directly inform how staff moves forward on
25 rule that extends cap and trade beyond 2020.

1 We would formally request that the Board direct
2 staff to postpone the release of a draft rule until spring
3 of 2017, as per their original timeline, to allow the
4 scoping plan process to continue in good faith, that the
5 considerable effort we are putting into this plan would
6 significantly inform any rule that extends cap and trade
7 beyond 2020.

8 Thank you.

9 CHAIR NICHOLS: Okay. Thank you.

10 Any comments, questions?

11 Okay. Thanks, Katie.

12 We have some people who have asked to come speak
13 to us. And so I think we should probably just go to them
14 next beginning with Brad Neff from PG&E. The list is up
15 on the Board.

16 MR. NEFF: Thank you, Madam Chair, and members of
17 the Board. My name is Brad Neff, and I'm here
18 representing IETA, the International Emissions Trading
19 Association. So as the name suggests, we are strongly in
20 favor of continuing cap and trade post-2020. There is
21 significant momentum for cap and trade around the world.
22 There are currently 40 nations and 20 subnational
23 governments representing 25 percent of global GHG
24 emissions that are currently under a Cap-and-Trade
25 Program, or carbon pricing program.

1 If you look to Paris, the Paris Agreement,
2 Article 6 explicitly mentions market mechanisms. And
3 within the next 18 months, we expect that globally there
4 will be a doubling of the size of carbon markets around
5 the world. So the direction is clear globally that there
6 is a trend, and, of course, California is on the forefront
7 of that trend. And much of that is thanks to the good
8 work that you have done.

9 As staff has mentioned, this is a defining moment
10 in California's strong history in environmental
11 stewardship, and a time to strengthen cap and trade and
12 support it as the backbone of California's climate
13 policies.

14 As far as the scoping plan, we agree that this
15 should be a holistic approach: That in order to, as staff
16 has suggested, to fund the optimal suite of policies, we
17 suggested that an analytical tool that can perform such
18 optimization should be used for the evaluation of this
19 suite of options, and that can also include pricing
20 mechanisms, like cap and trade and a carbon tax, which
21 currently PATHWAYS cannot do.

22 Just to reiterate cap and trade is the only
23 policy that can -- that provides environmental certainty
24 by capping emissions, assures least cost solutions are
25 done first before more costly solutions, and responds

1 automatically to macroeconomic fluctuations.

2 So again, IETA is strongly in support of the
3 continuation of cap and trade, and we look forward to
4 continuing to work with you and collaborate with staff on
5 the implementation and the continuation of that program.
6 Thank you very much.

7 CHAIR NICHOLS: Thank you.

8 MR. BENGTSSAN: Good afternoon. Good Afternoon,
9 Board, Madam Chair. Nathan Bengtssan here representing
10 PG&E. As you probably well know, the draft scoping plan
11 concept paper includes four post-2020 options for GHG
12 emissions reductions regimes. And I just want to come and
13 say that PG&E has long been supportive of well-design
14 market-based mechanisms for achieving GHG reductions. And
15 I'm here today to reiterate that support.

16 There's broad consensus among environmental
17 economists that market-based mechanisms that put a price
18 on GHG emissions, like California's Cap-and-Trade Program,
19 provide the most effective path to lowering emissions, and
20 they allow regulated entities the flexibility to make
21 choices that help California meet its clean energy goals
22 in a way that is cost effective to consumers and the State
23 as a whole.

24 So that's what I'm here to say and I think we're
25 happy to hear staff reiterate that they have a preference

1 in terms of the options that were laid out.

2 Thanks very much.

3 CHAIR NICHOLS: Thanks.

4 MR. LARREA: Good afternoon, Madam Chairman and
5 board. My name is John Larrea. I'm with the California
6 League of Food Processors.

7 Just today, I got a look at the concepts paper,
8 and it's quite ambitious. And so knowing that, I think we
9 need to plan even more for how we're going to get past
10 2020. One of the things I'd like to see, at least our
11 industry would like to see, is more of an industrial
12 presence, either on the Board or through an advisory
13 committee. We're moving past 2020, and industry is going
14 to be just as much a part of this and a part of making
15 this work as the rest of the Californians. And we can
16 provide a lot of input as part of the staff maybe even or
17 an advisory committee along the lines of the EJAC itself,
18 where we can look at these concepts before they're put out
19 in the public, and we can make advisory attempts to that
20 too.

21 The other -- going forward, we're going to need a
22 lot of help in order to make this work for food
23 processors, those of us who are located, especially in the
24 disadvantaged communities, which we are sometimes the
25 major employers there. You know, the ambitiousness of

1 trying to reduce these emissions that much is going to
2 impact these communities. And these communities are the
3 ones that we're invested in as well. They're the people
4 who come to work for us. We're the ones who keep those
5 communities alive in many cases. And so these impacts
6 really need to be studied really well as well. And we
7 also need some help in terms of how we're going to get
8 there technologically.

9 One of the things that we might be able to do is
10 to reestablish the Economic and Technology Advancement
11 Advisory Committee. That there is right next to the EJAC
12 committee, and it also looks at the new technologies, not
13 only here, but also in Europe, and investments that would
14 work. We could examine the way that these various plans
15 are going to work out and see what types of technologies
16 are going to be there, and avoid the black box type of
17 regulations that may be put into place where we're
18 expecting this technology to come, but it never really
19 does.

20 And as a food process, I can tell you, there's
21 really no new technologies for boilers. That's our main
22 process. And if we could find something that could reduce
23 us and make us more efficient, say 50 percent more
24 efficient, that would bring benefits, not only to the
25 communities we operate in, but also to our markets as

1 well. So we'd like to see some of that, too.

2 Finally, the economic analysis that's coming, it
3 really needs to be robust. It really does, if we're going
4 to move forward on this, and it needs to take in more than
5 just what the impacts of these are going to be. It needs
6 to look at all the factors that are going to affect
7 industry out there.

8 Just today, the PUC just passed a proceeding
9 that's going to grant PG&E \$3.6 billion in rate increases
10 over the next three years. That's more than the cap and
11 trade has collected in the last four. And, you know,
12 those are the types of pressures that industry out there
13 is going to have to deal with in terms of trying to get to
14 where we're going.

15 So, you know, this is why industry needs to be a
16 part of this process here, not just as a stakeholder
17 making public comment.

18 Thank you.

19 CHAIR NICHOLS: Thank you.

20 (Laughter.)

21 CHAIR NICHOLS: You really set it off.

22 MR. EDGAR: I've got some new material today.

23 CHAIR NICHOLS: Hi.

24 MR. EDGAR: My name is Evan Edgar, California
25 Compost Coalition and Clean Fleets Coalition. We are the

1 industry. We're here to help. We're at the table. We
2 have the technology. We can take food waste and make
3 carbon negative fuel. So everything about this plan we
4 feel we can achieve. We support the 2030 goals, and we
5 support cap and trade.

6 When it comes to composting, we take urban food
7 waste and agricultural waste through anaerobic digestion
8 and we make a biomethane. With the biomethane, we make a
9 carbon negative fuel and put it right back into the fleets
10 we operate.

11 The thing about our program is it's one of the
12 most cost effective programs out there. They said we're
13 nine bucks a ton as every cap and trade invested, and we
14 intersect all five pillars as part of the intersect -- the
15 integrated approach.

16 Number one, short-lived climate pollutants. We
17 mitigate methane by getting food waste out of the
18 landfill. We support that. Big landfills do not. Big
19 landfill says they can't get it done. Well, we can get it
20 done. We can divert 90 percent of the food waste out of
21 the landfill by 2025 to make a low carbon fuel.

22 Number two, 50 percent reduction in petroleum.
23 We're doing that right now. We're getting off diesel.
24 We've done that this decade. We're moving on to CNG and
25 we're make RNG. By 2025, our industry, the 15,000 fleet

1 of refuse and recycling trucks can get off diesel by 2025
2 with RNG, if we have a short-lived climate pollutants plan
3 in place that bans organics from the landfill.

4 Number three, biomass energy. We have glut of
5 biomass in a valley. They're burning it. We've got to
6 have new technology, such as biomass gasification in order
7 to achieve the 50 percent RPS. So all the composters, we
8 have biomass. We're citing Phoenix Energy Biomass plants
9 throughout California, which makes a biochar that we can
10 blend with compost for the Health Soils Initiative.

11 Number -- another one is -- four is everyone of
12 our facilities net zero. Well, let's double down on
13 energy efficiency, so that we have net zero facilities.

14 And number five is digestate. When you take food
15 waste and you anaerobically digest it, you get a
16 digestate. We make compost out of it. We put it back in
17 the soils. That's called the Healthy Soils Initiative.
18 We have found out in the valley that reducing water use by
19 30 percent by using compost and biochar in the soil in
20 order to have organic compost. We're doing that today.

21 So the industry is at the table. We have a good
22 set of plans in 2030. We're working with staff. And we
23 feel that we can do this. So we need a set of 2030 goals
24 and we need cap and trade. I represent a lot of project
25 developers, and our capital is being stalled out because

1 of the fact that signals in the marketplace on cap and
2 trade has diminished.

3 We feel cap and trade needs to be robust, so this
4 signals to industry we have the technologies, we have a
5 lot of little green boxes. We don't need a big black box.
6 That every little green box we have from anaerobic
7 digestion to recover compost is working. We are no longer
8 the waste industry with landfills, we are the refuse and
9 recycling industry and composting.

10 Thank you.

11 CHAIR NICHOLS: Thanks.

12 MS. MCGHEE: Good afternoon. My name is Lisa and
13 I'm one of the off-site airport parking operators at San
14 Diego. More State funding and more programs will and are
15 needed. Penetration is key. Without funding to
16 incentivize adoption, it is not likely. And without
17 enhancement of a requirement to use cleaner technologies,
18 we will just slow down opportunities. Focusing on the
19 carbon score and vehicle miles traveled furthers the
20 reduction opportunity of emissions.

21 Putting forth efforts of funding on those that
22 travel the most and using enhanced renewable technology
23 that is available today accomplishes the greatest
24 reduction immediately.

25 Enforcing more renewables should be promoted and

1 incentivized sooner than later. All of the alternative
2 fuel choices available, including electrification, does
3 Not have enough infrastructure to entice adoption of
4 vehicles that are available and to provide a refueling --
5 and to provide a refueling corridor.

6 We need more deployment of infrastructure. We
7 have vehicles and technology, but all of the low carbon
8 fuels infrastructure are sparse and needs more action.
9 For example, in 2009, I adopted biodiesel as my fuel in my
10 diesel buses. There was only one refilling public station
11 in San Diego. Today, there is only two, and it's seven
12 years later.

13 2015, I adopted ZEV buses. Electrification
14 infrastructure is challenging for fleets resulting in it
15 being more costly per mile than conventional fuels due to
16 demand rates, but how many understand this? Let me give
17 you an example. Your kilowatt goes from \$0.23 to \$22 per
18 kilowatt in a demand rate. So do the math. These are
19 part of problems in electrification that are only
20 experienced by plugging in two buses at one time.

21 The only -- today, there's only -- today, I'm the
22 only San Diego bus operator after one year of early
23 adoption. The actions by our utility service territories
24 needs to be incorporated and should include an incentive
25 for PEV charging, taking the approach, "Build it and they

1 will come". More efforts on renewable and infrastructure
2 will play a part in penetration, thereby public health.

3 It is safe to say there is much we do not know,
4 thereby there is an opportunity to learn what we don't
5 know. Let's incorporate more fleet programs and
6 infrastructure.

7 Thank you.

8 CHAIR NICHOLS:

9 MS. ROZOWSKI-VOGT: Good afternoon. I'm Hannah
10 Rozowski-Vogt with the Environmental Defense Fund. And
11 I'd first like to start today by thanking everyone at the
12 ARB for the work that they've done on the scoping plan,
13 and for the commitment that it represents to ambitious
14 climate action.

15 We would also like to state our preference for
16 concept one of the four that are laid out in the scoping
17 paper. We believe this represents an extension of the
18 existing suite of policies, including cap and trade, which
19 will best for California. We believe this is the best way
20 forward, because California's climate policies have been
21 working together effectively. As the emissions inventory
22 released with this concept paper showed emissions are
23 already declining, and at the same time our economy is
24 thriving.

25 We believe cap and trade is an essential part of

1 California's climate package, because it is the only
2 policy that places and absolute limit on carbon pollution
3 and ensures we meet State reduction targets with cost
4 effective reductions. We also believe that cap and trade
5 is important, because the linkages possible through cap
6 and trade facilitate international collaboration.

7 Again, thank you for all the work you guys have
8 done.

9 CHAIR NICHOLS: Thank you.

10 MR. MAGAVERN: I'm Bill Magavern with the
11 Coalition for Clean Air. I thought this was an
12 interesting paper, and I really liked the holistic
13 approach. One of the things I took from it is we have a
14 comprehensive suite of policies that are working and that
15 in order to keep the emissions reduction going down to the
16 23 target, we need to build on and strengthen those
17 policies. So in the electricity and building sectors, we
18 have that mandated by SB 350 and ARB has within its
19 authority the ability to also strengthen those policies
20 for the transportation and industrial sectors.

21 In transportation, as you know, we need to build
22 on the success of our Clean Cars Program, zero emission
23 vehicles standards, we need to implement the Freight
24 Action Plan, strengthen then Low Carbon Fuel Standard, and
25 invest in public transit and active transportation to

1 reduce vehicle miles traveled.

2 I think we also need to pay more attention to
3 reducing emissions from the industrial sector, which has
4 somewhat lagged in reductions. And then, also in looking
5 at the concepts, this is the first time that I can
6 remember when ARB has actually put forward ways that we
7 could get to our target emission reductions in the absence
8 of cap and trade. So I thought from analytical
9 perspective that's a real step forward, and I hope that
10 you will seriously consider concepts 2 and 3, because they
11 show that by continuing to have standards that reduce
12 emissions in the transportation and industrial sectors, we
13 can get to where we need to go.

14 And I think that I would prefer some kind of
15 hybrid between the two, because I would hate to choose
16 between the transportation and industrial sectors, when we
17 need to reduce emissions in both of those.

18 So I look forward to continuing this work with
19 you.

20 CHAIR NICHOLS: Great.

21 MR. SMITH: Good afternoon. Adam Smith with
22 Southern California Edison. I'm just here to continue
23 Southern California Edison's support for the Cap-and-Trade
24 Program, and express that our preferred option is also the
25 preferred option of ARB staff. And I think you're heard

1 from a couple other stakeholders here.

2 We view cap and trade as not just a cornerstone
3 of our State's climate policy, but kind of the backbone.
4 It doesn't just achieve emission reductions. It also kind
5 of vouch safes that we'll achieve the overall economy-wide
6 goals that we've set for ourselves.

7 Southern California Edison realizes that as we
8 continue to March down the path to 2030 and 2050,
9 electricity is going to be more and more utilized as an
10 end-use fuel. And it will have to be increasingly clean
11 in order to achieve the goals which we've been laying out
12 in this concept paper. That's a vision that we support
13 and we look forward to participating in.

14 Thanks.

15 CHAIR NICHOLS: Thank you.

16 MS. FRIEDMAN: Madam Chair, Board members, Randal
17 Friedman. I'm here as an individual, and an EV owner, and
18 an EV activist. I've been working with a group called Sac
19 EV, and several other groups across the State in the issue
20 of EV infrastructure. And I know I've talked with you
21 several times in the past. And I'm first saying that
22 there is some good news there. I'd certainly recognize
23 Supervisor Serna, because he personally championed the now
24 open level 3 charger at Sacramento Airport. And there's a
25 ribbon cutting next month that I would like to see some of

1 you there at. It truly is one of the most needed in this
2 legion.

3 We also put together a proposal that the Energy
4 Commission adopted, and they're now implementing the
5 north/south corridor chargers along Highway 99. Again,
6 all very good news.

7 Having said that, and listening through today and
8 understanding just how central the ZEV program is to this
9 2030 goal, there's still a significant way to go. I'm
10 happy with -- I just got a 2016 Nissan Leaf. I now have a
11 range of 120 miles and it's wonderful, except I looked at
12 the map and I still can't really get to Paso Robles for a
13 trip to the wine country there. There still isn't just
14 the infrastructure even for this generation of cars.

15 I also listened to how much you talked about a
16 great program to incentivize used EVs, like the 2012 Leaf
17 that I traded in. They are truly bargains, and they would
18 be wonderful for low-income residents of places like the
19 San Joaquin Valley to be able to purchase.

20 But with only a 50 or 60 mile usable range, they
21 truly do need the public charging infrastructure to make
22 that program work, and again, it's not there. So I would
23 suggest in the scoping plan that you really focus on the
24 public infrastructure element of the ZEV Program. Someone
25 needs to take ownership and leadership in this. And I

1 think you are probably the only ones in a position to do
2 that.

3 And there's a lot of people out there that will
4 certainly help you. We've certainly suggested in the past
5 that there needs to be a statewide EV Infrastructure
6 Advisory Group that can work based upon real user
7 experience and the expertise to work with the policymakers
8 to actually say this is what's needed, these are the
9 standards that are needed. When you're putting a charger
10 in the San Joaquin Valley make sure it's heat resistant
11 and will be dependable, if that's the only place you'll be
12 able to charge for 50 or 60 miles.

13 Finally, since we heard a lot from the EJ
14 community here, I would also just like you to consider
15 public EV infrastructure is an EJ issue. Just look at the
16 PlugShare map or the ChargePoint map at the number of
17 chargers in the Bay Area our Silicon Valley versus Fresno,
18 and think about, okay, if you own an EV in Sunnyvale,
19 you've got all sorts of places to charge. If you own an
20 EV in Fresno, you're very, very limited.

21 And I truly believe that's an EV issue that in
22 your scoping plan you should address. So there's a lot of
23 people willing to help and would love to see ARB take
24 leadership in this.

25 Thank you.

1 CHAIR NICHOLS: Thank you.

2 MS. SULLIVAN: Good afternoon, Chair Nichols and
3 Board. I am Shelly Sullivan with the Climate Change
4 Policy Coalition. I am not Julia Vessey.

5 CHAIR NICHOLS: I was going to say unless you had
6 changed dramatically.

7 (Laughter.)

8 MS. SULLIVAN: No, but she was kind enough to
9 give me her spot.

10 CHAIR NICHOLS: Okay.

11 MS. SULLIVAN: We're just looking for a little
12 bit of clarification with regard to Washington State. We
13 know that they've recently re-released its revised cap
14 proposal. And that rule contains -- continues to
15 contemplate providing Washington covered entities the
16 ability to use California's cap-and-trade allowances to
17 comply with the Washington State rule. And since this is
18 a one-way linkage, and it would have impact on
19 California's Cap-and-Trade Program, how is ARB staff
20 evaluating the impact, both from an economic perspective
21 as well as an environmental perspective? That's something
22 that, you know, we're very curious about. We know that
23 Reggie is currently evaluating what it would mean for his
24 program. And we didn't see anything like that in the
25 concept paper, realizing that the concept paper is just

1 that, a concept paper.

2 And obviously, we look forward to commenting on
3 that further and moving forward with additional work on
4 the concept paper. But that's one thing that we did want
5 some clarification for, and we also wanted to know that,
6 you know, we agree with IETA and the others that were in
7 support of the cap-and-trade system.

8 So that's -- basically, we're just looking for
9 more clarification on that issue.

10 Thank you.

11 CHAIR NICHOLS: Thank you. So is that the end of
12 the folks who actually want to speak?

13 Okay. Well, then we can draw this back for some
14 further discussion.

15 If the staff wants to respond to the questions as
16 to what's going on in Washington State and what we know
17 about it, I know Michael Gibbs, I think, has been actively
18 involved in those discussions. Michael, you can defer if
19 you want to, but since you're the person that I last
20 talked to about this issue, you get to address it, at
21 least to start with.

22 ASSISTANT EXECUTIVE OFFICER GIBBS: Sure. Thank
23 you. And thanks for the question, and for the opportunity
24 to speak about it. You're probably familiar that the
25 State of Washington has put forward a regulation to

1 addresses greenhouse gas emissions in their State. It is
2 not a Cap-and-Trade Program, but it's a limit on
3 individual facilities with a declining cap on each
4 facility.

5 Recognizing that there may be limited
6 opportunities for individual facilities to reduce
7 emissions at the rate that they're specifying, they
8 included in their proposal the opportunity to use
9 compliance instruments from other programs. They don't
10 specifically list the California program, the
11 Cap-and-Trade Program, in their most recent release. But
12 in discussions with them, we understand that that is, in
13 fact, their intent.

14 Before California allowances would become
15 eligible in their program, their agency, the Department of
16 Environmental Quality, would be -- or, sorry, the
17 Department of Ecology would be required to make a
18 determination that the California program is, in fact,
19 eligible for use in their program.

20 So from our perspective, we have corresponded to
21 understand what it would mean for another program, such as
22 Washington, to access compliance instruments from our
23 program, and what it would do in terms of the costs to our
24 compliance entities as well as any other linked partners
25 that we have, such as Quebec, currently linked, and the

1 program that's being developed in the Province of Ontario
2 that will be considering whether they're appropriate to
3 link with in the near future.

4 So we are examining that, of course, and we'll be
5 looking at it from both the economic and environmental
6 perspective. One of the things that we're looking at, in
7 terms of our own program, is ensuring that we have control
8 over what our allowances can actually be used for.

9 Currently, there is no prohibition in the program
10 regulation that prohibits anyone from purchasing and
11 retiring instruments in our program. And that's
12 reasonable and we can talk about that. But when it
13 becomes another program, such as a State program, that
14 deliberately wants to use our instruments, that's another
15 matter.

16 And so what we are looking at is including in our
17 regulatory amendments to be considered is creating a
18 section that would list other programs that are eligible
19 to use our programs for their compliance. And by adding
20 that to the regulation, we would be stating specifically
21 which programs are eligible to use our instruments. And
22 if you're not on the list, then you would not be eligible
23 to use them.

24 So that's a way to maintain control over the
25 instruments in the program. And we think that that is

1 something worth considering and we'll put forward to get
2 feedback and comment on.

3 As part of then once you have assured control,
4 you can then assess whether you want to support the type
5 of one-way linking that Washington has put forward. And
6 that's the analysis that we would then subsequently do to
7 assess whether that would be beneficial for the State and
8 beneficial for the furtherance of climate action across
9 multiple jurisdictions.

10 CHAIR NICHOLS: So one of the consequences of
11 being a leader in this space is that things that
12 California has pioneered are now being picked up and
13 looked at and potentially adopted not necessarily in
14 exactly the way we might wish them to be, but in order to
15 adapt to the political and economic conditions in other
16 jurisdictions.

17 And it certainly is one of the reasons why we
18 have always said that we hoped that there would be a
19 national program addressing climate change that our State
20 program could be a part of and adapt to, rather than, you
21 know, continuing to always have to be responsible, if you
22 will, for what everybody else is doing.

23 But until that wonderful day arrives, we find
24 ourselves in the position of having to be, and wanting to
25 be, responsive to people literally all over the world, who

1 come to California or ask us to go there and talk to them
2 about how they can create effective climate programs of
3 their own.

4 So it's a big responsibility that we've
5 undertaken, but I think it's important that we acknowledge
6 that we are moving the needle, not just by what we do in
7 California, which is our number one responsibility to do
8 whatever we do here successfully, but also that we
9 recognize the impact that what we're doing is having on
10 other people and their visions of what they can do as
11 well.

12 I just want to say a couple things about this
13 paper, because I find it both exciting and also, frankly,
14 somewhat scary. And the reason why it's somewhat scary is
15 that thinking out loud is always scary, especially when
16 government does it.

17 (Laughter.)

18 CHAIR NICHOLS: We have opened ourselves up in a
19 very unusual way to people coming to us with ideas both
20 for what they like and what they don't like about what
21 we're currently doing and what they think we should
22 consider if we were to dramatically change everything that
23 we're doing.

24 And I think it's good to do that, because I think
25 you should always be engaged in the process of criticizing

1 and accepting criticism for what is going on and what
2 could be better.

3 At the same time, I wouldn't want anybody to be
4 under and illusion that we're going to stop the world
5 while we develop the new scoping plan. We are
6 implementing a number of very big, costly, important
7 regulations as part of our existing climate program, of
8 which the Cap-and-Trade Program is certainly one, and an
9 important one, but not the only one. Oregon has adopted
10 California's Low Carbon Fuel Standard.

11 And under any potential scenario that I can think
12 of, we're going to need not only to continue that Low
13 Carbon Fuel Standard, but actually to increase the amount
14 of clean fuel that we are requiring under that program.
15 The Renewable Portfolio Standard, we were lapped. You
16 know, we started out with a certain number, and now we're
17 coming up with a more ambitious number, layered on top of
18 a Cap-and-Trade Program, so that they -- our electric
19 generating sector is subject to multiple different
20 requirements, and yet that program is also operating in a
21 way that's pushing change, and, in fact, the change is
22 probably happening even before that regulation. I mean,
23 ahead of -- ahead of that regulation taking effect, thanks
24 in part to the Clean Power Plan.

25 The emission standards for motor vehicles, and

1 I'm naming three of our big regulatory programs that
2 certainly taken together are responsible for more total
3 emissions reductions than the Cap-and-Trade Program. The
4 Vehicle Emissions Program in the midst of a review that
5 we're undertaking with the Obama administration, we're
6 going to be hearing more about that in the months to come.

7 But it turns out that the greenhouse gas emission
8 standards that were adopted nationally, based on our
9 original Pavley standards, probably aren't ambitious
10 enough. I mean, they're certainly not ambitious enough to
11 meet the goals that we have for decarbonizing our economy,
12 and they're probably not as ambitious as they should be in
13 terms of what the industry actually could accomplish, even
14 with existing known technology.

15 So the world is racing ahead, and we have the
16 opportunity to help push it further and channel it in ways
17 that will overall work best for achieving the kind of
18 very, very low carbon economy that we need to see. But I
19 don't want to lead anybody to think that the fact that
20 we're open to thinking about rebalancing any of these, or
21 doing them in different combinations, or adding new
22 elements to it, means that we're not going to continue
23 working to improve these regulatory programs, regardless
24 of where we are in the scoping plan.

25 And I want that message to be conveyed very

1 respectfully, but also very clearly to all of our
2 advisors, not only the environmental justice advisors who
3 I know have strong concerns about cap and trade as one of
4 the tools that we use, but to our various other economic
5 sectors that are interested as well, that the scoping plan
6 is the place where we could come together and sort of look
7 at the mix of all of these measures. But we're on a
8 target to -- we're on a path to continue to improve the
9 program that we have and to implement it effectively. And
10 that's not going to be able to nor should it wait while we
11 work on the scoping plan.

12 It's too important for the goals that we've set
13 for ourselves. It's too important to the country,
14 frankly. If you look at the commitments that the United
15 States government has made to the Paris agreement, and
16 that other countries are making, we need these measures
17 that we're implementing right now. So I just think it's a
18 tough thing, because every year -- at least every two
19 years, we get a new crop of elected representatives in the
20 State and the federal level, many of whom have no idea
21 really what this whole program is. And that's not their
22 fault. That's at least as much our responsibility as
23 anybody else's.

24 But it makes me wonder whether we don't need to
25 kind of do perhaps as a separate piece, you know, another

1 round of explanation of what this scoping plan -- what
2 this 2030 program comes on top of, because I think we tend
3 to assume that people understand everything that
4 we're -- that we're doing now as part of our -- as part of
5 our climate action program, and how that meshes with our
6 other environmental and energy programs.

7 I think the scoping -- the current version was
8 a -- tried to, you know, allude to those things, but it's
9 a complicated story to tell. And maybe we need to find
10 some better ways of telling the story.

11 But anyhow, that's just some general observations
12 and thoughts. I'm sure other Board members have questions
13 and/or comments that they would like to convey starting
14 with Mr. Serna.

15 BOARD MEMBER SERNA: Thank you, Chair Nichols. I
16 just want to use this opportunity, first of all, again to
17 thank staff for a job well done thus far on what has been
18 referenced to as very complicated and a scary subject.
19 But I also wanted to note, especially -- and thank Katie
20 Valenzuela, who I think is hiding back there, from our
21 EJAC. And the fact that she mentioned ongoing
22 collaboration, cooperation with staff, I'm glad to hear
23 that coming from our Environmental Justice Advisory
24 Committee.

25 But I also wanted to take the opportunity to

1 thank, and I'm looking directly at Mr. Corey, his taking
2 very seriously some of the early feedback that we received
3 from this newly reconstituted EJAC about, not just the
4 roles, the expectations of our Environmental Justice
5 Advisory Committee as it relates to this particular
6 document moving forward, but, you know, where -- how can
7 we really kind of push the envelope to really make the
8 best use of their advice, their counsel, and also just
9 doing some small things, taking care of some low-hanging
10 fruit as it were, in terms of making sure that our EJAC is
11 flanked appropriately with our various contractors and the
12 roles that they play to assist the Committee and
13 ourselves.

14 So again, just thanks to both staff, especially
15 Mr. Corey, and also to Katie who I'm hoping will convey
16 our thanks to the entire Committee.

17 CHAIR NICHOLS: Thank you. Well said.
18 Appreciate it. Anybody else?

19 Yes, Ms. Mitchell.

20 BOARD MEMBER MITCHELL: One of the commenters
21 mentioned that it would be a good idea to have an
22 industrial presence on the effort that we're making here.
23 And I couldn't agree more. He also mentioned that
24 technology is important for industry. And I think that is
25 a very good suggestion that was made. We need to work

1 with the industries that are going to put into place these
2 measures that will get us to the targets.

3 And so they need to be at the table. They
4 understand better than many people what their industry is
5 doing now, and what it can do. With help from our
6 scientists in the technology field, we can work together
7 to move the technology forward, so maybe we can find
8 something better than just boilers. And I think that's
9 important. We've certainly done that in other industries.
10 We've moved forward with new technologies that none of us
11 dreamed of.

12 CHAIR NICHOLS: Excuse me, I didn't mean to
13 interrupt you I was going to build on what you said. AB
14 32 contained in it a requirement, not only for an EJAC,
15 but also an ETAAC. And there was an ETAAC. It was very
16 active, and they did a report. At the time that they
17 concluded their work, they disbanded, basically because
18 they had given us their best advice. They'd done a lot of
19 good work and we picked up quite a bit of it. You know,
20 parts of it were certainly still left hanging.

21 And I was thinking as we were listening to the
22 presentation and the comments from Mr. Larrea, that it
23 probably would behoove us to reconstitute the ETAAC
24 perhaps in a different form, but to give them -- to give
25 some entity like that a formal role again. It's -- I know

1 that it requires work to manage a committee like that
2 appropriately, and obviously also requires help from
3 individuals willing to serve in that kind of capacity.

4 But I think we've got a lot of people in the
5 State with the ability to contribute. And it would be
6 great to take advantage of some of that experience that's
7 out there in kind of a focused way to work through some
8 these issues that we've now identified as being key. So I
9 very much want to associate myself with your comment.

10 So thanks.

11 BOARD MEMBER MITCHELL: The other thing I want to
12 mention is that how valuable the report is, because I know
13 all of us get questions about, well, you're doing all this
14 work on greenhouse gas reduction, but where are you? Do
15 you -- have you done it? You know, how far along are you?

16 And the charts that we have in front of us help
17 explain that. And that's important to the public to see
18 what we've accomplished, what we still have to accomplish,
19 but to kind of give us a measuring stick of what we're
20 doing, I thank you very much for that.

21 CHAIR NICHOLS: Dr. Balmes.

22 BOARD MEMBER BALMES: Thank you, Madam Chair.

23 So I, too, want to congratulate the staff on a
24 report that, to me, shows there's been a continuing
25 evolution in our thinking with regard to the scoping plan.

1 I remember the first one and the update. And the first
2 one I had to fight literally, practically, to get public
3 health in the document and to get us to collaborate with
4 our colleagues in CDPH. And I understood from my briefing
5 yesterday that CDPH has been -- had active input into
6 this.

7 And I see that in, whatever it is, slide 10, the
8 objectives that improved public health is, you know,
9 number 5 or 6. So I like that. And I wanted to both
10 agree with Supervisor Serna that it's great to see EJAC at
11 the table and here today. Even if I'm not entirely sure
12 that I agree with them about cap and trade, I think their
13 input is important in that regard.

14 And I also agree with Ms. Mitchell and Chair
15 Nichols about having some kind of stakeholder committee
16 for business and industrial input. I think it was well
17 said that -- by Mr. Larrea that in the future we're really
18 going to have to push on industrial sources. So we need
19 them at the table to figure out the best way to do that.
20 So we're continuing to promote a resilient economic
21 growth, which was a number four on our list of objectives.

22 The final comment I would like to make is that
23 some of you know that adaptive management is near and dear
24 to my heart. Another thing, I fought for with the
25 original scoping plan. It had a different name then. But

1 I think that's still something that -- you know, maybe
2 that's too far in the weeds here for this scoping plan
3 document. But I don't want to forget that we're -- with
4 every effort to reduce greenhouse gases from the largest
5 emitters, we should also be concerned about toxic
6 emissions.

7 And the last time I heard an update on our
8 adaptive management program, I was, you know, pleased that
9 we were moving forward, but I don't want to forget it in
10 this round.

11 CHAIR NICHOLS: Thanks.

12 Other comments?

13 You know, I realized, and unfortunately Katie
14 left, but I was focusing on her comment about cap and
15 trade, but it was really much more broadly intended,
16 because I've been reading some of the press about people's
17 assessment that the program is in jeopardy or that it
18 might not continue, because the last auction didn't sell
19 out all of the allowances that were available. And I have
20 been talking to some reporters, and I've now seen other
21 people weighing in, which is very helpful, with the
22 explanation that the fact that there were allowances that
23 didn't -- that were sold -- offered at auction that
24 weren't sold. Doesn't say anything about the overall
25 success of the program and what it's accomplishing.

1 And not to go into that any further here, but
2 just to say that, you know, the staff continues to look at
3 ways to make that program work better, and there are
4 options, even within a Cap-and-Trade Program, for example.
5 You know, we didn't -- we could auction all the
6 allowances. We don't have to do them the way we do them
7 with respect to -- we can make the utility holders of all
8 the industry allowances and not give any allowances to
9 everybody who's affected.

10 So there's just -- there's multiple ways you
11 could design a program. I'm not suggesting that we should
12 be doing any of them. It's just that it's a -- it's
13 always good when you're thinking about moving forward to
14 think about what those options might be.

15 VICE CHAIR BERG: As I'm sitting here reflecting
16 on when we first started the scoping plan and how really
17 the fear was the blank page, we were starting from the
18 beginning and it seemed very overwhelming. And then I
19 look at chart 17 where we see the progress we've made, but
20 I see the big dip that we need for 2030, and even a bigger
21 dip for 2050. And we have, as Chair Nichols said, we have
22 a very good foundation, but that foundation is not going
23 to look the same by 2030.

24 So I haven't decided which is more
25 anxiety-ridden, starting with a full blank page or knowing

1 that we now have to create the blank page on a foundation.
2 And to me that's where the real opportunity is is to see
3 in our concept paper how do we leave things open enough
4 and creative enough, look innovatively enough while, as
5 Chair Nichols said, we are focusing on the very important
6 programs that we know are going to get us there for the
7 next several years, and knowing that the landscape by
8 2030, and certainly by 2050, is going to be brand new.

9 So it's just a huge, huge challenge, and I
10 congratulate you all. I know it keeps me up sometimes at
11 night, but it really is exciting.

12 And so congratulations.

13 CHAIR NICHOLS: Great. Hector.

14 BOARD MEMBER DE LA TORRE: This isn't our scoping
15 plan, but it's interesting to know what other people are
16 doing. Norway has committed to having zero sales of
17 gasoline vehicles in their country by 2025, and zero
18 deforestation by the middle of the next decade.

19 BOARD MEMBER BALMES: Are they going to stop
20 extracting oil? Are they going to stop extracting oil?
21 They're a major oil producer.

22 BOARD MEMBER DE LA TORRE: Are an oil producer,
23 yes. (Laughter.)

24 BOARD MEMBER DE LA TORRE: But those are two
25 major initiatives on their part. And it certainly shows

1 that other countries and other jurisdictions are doing
2 things well above and beyond what we're doing, even though
3 we are always held up as doing all these extreme things by
4 some people.

5 Clearly, other folks are doing a lot in this
6 space. And it's good to, you know, put it in context of
7 what other people are doing. Of course, some people are
8 doing nothing, but we're not on the edge. We're out
9 there, but not on the edge. And we will continue to push
10 the envelope, I think.

11 CHAIR NICHOLS: Okay.

12 BOARD MEMBER TAKVORIAN: Thank you. So I wanted
13 to thank the staff. I think it's a great beginning
14 concept paper. It's broad. It's comprehensive. It's
15 complicated. And I also wanted to piggyback on Supervisor
16 Serna's comments about the EJAC. They're doing an amazing
17 job. I've been able to go to the last couple of meetings.
18 And the EJAC members, working on a volunteer basis, are
19 meeting for days at a time. They have conference calls
20 that I don't know who can keep up with, but staff is
21 keeping up with them. They're doing these deep dives into
22 each of the topics areas, and are really learning about
23 them. And they do have, I don't know, 15 pages of
24 recommendations at this point that they're moving through.

25 So I really appreciate the staff taking this very

1 seriously. And I remember being on the first EJAC when
2 the -- I didn't remember the name of it, ITAC[sic] had
3 lots of people and lots of staff, and EJAC had no staff
4 and it was just us sitting around trying to figure out
5 what to do. So it's interesting that things have shifted
6 a bit.

7 So I think that we certainly do need to focus on
8 the industrial sector, and if that task force needs to be
9 reconstituted or something like that, I would certainly
10 support that. I think they need to be there.

11 I do wonder though about the -- oh, and I just
12 want to say, we have mentioned it just a little bit, but
13 there's how many, 10, 12, meetings that are going to occur
14 around the State. That's unprecedented. And I just want
15 to express my deep appreciation to the EJAC and to the
16 staff to Trish especially. She's been working
17 particularly hard to make that happen. And I think we're
18 going to get a lot of good input. So that leads me to
19 questions about the timeline that I have concerns about,
20 and -- because I want to ensure that those workshop
21 comments are definitely incorporated into the scoping
22 plan. And then you have the fall workshops that are
23 outlined, and it just seems like the different versions of
24 the scoping plan come right on the heels of these
25 workshops. So I'd like to get a clearer sense about the

1 timeline.

2 I also want to make sure that the OEHHA report
3 that will come forward on the benefits and the outcomes
4 that's due out at the end of the year is incorporated.
5 And I may have missed it, but I'm not sure how that was
6 described in terms of the timeline.

7 So I'm worried about how that timeline proceeds.
8 And I don't think that we're asking for any of the rules
9 as Mary -- Chair Nichols, you have mentioned. Those
10 aren't what are being asked to be delayed, but those
11 things that are important to inform the scoping plan, I
12 think, are important to make sure that they're completed,
13 so that there can be full analysis.

14 And I did take that as what Katie's question was.
15 And I would want to ask staff if we could get a response
16 in regards to the continuation on cap and trade or the
17 extension of cap and trade, and how that's going to
18 intersect with the scoping plan

19 I would also say that I hope we really do take
20 concepts 2 and 3 seriously, and that we have an authentic
21 conversation about them. I was heartened to see them in
22 the concept paper. And I think as transportation being
23 the largest sector of GHGs at 36 percent, we need to
24 continue with our efforts with cars and trucks and freight
25 and buses, but we also need to make a paradigm shift from

1 cleaner vehicles and fuels to transit and alternative
2 transportation. And that's going to require involvement
3 in land use, and that's complicated and very local in
4 nature.

5 But I think that then also relates to SB 375 and
6 how this program relates to that and those targets, and
7 when those are upgraded.

8 And secondly, again, the industrial sector is
9 important, the second largest at 21 percent. And this is
10 critically important to fence-line communities and has
11 particular public health benefits as you all have noted
12 here.

13 So I think this is an incredibly great start, and
14 I'm really looking forward to the robust conversations
15 that I know will follow. And so if we could get -- if I
16 could get a response to some of the timeline issues, that
17 would be fantastic.

18 Thank you.

19 DEPUTY EXECUTIVE OFFICER CHANG: All right. So
20 on the timeline issues, I think there were kind of two
21 sets of issues. And one was related to making sure that
22 input from the community workshops over the summer and
23 that input from the OEHHA assessment would be included
24 into the scoping plan process.

25 The timeline for the community workshops is

1 approximately equal to the timeline for the other
2 workshops that we're going to be having over the summer,
3 as we continue to flesh out the scoping plan. So we're
4 going to continue to have workshops looking at various
5 sectors, looking in addition at the economic modeling, and
6 also the community workshops.

7 So the intention is that all of that input goes
8 into the draft scoping plan that will be released at the
9 end of the summer or early in the fall.

10 With regard to the OEHHA assessment of the
11 impacts of AB 32 that's due at the end of the year, one of
12 the -- the way that the process is designed, it is
13 designed that we'll be -- we've been -- well, let me back
14 up and say we've been working closely with OEHHA to
15 understand the kinds of analyses that they're going to be
16 doing, and it is intended -- the timeline is intended that
17 we would have time to adjust in the scoping plan process,
18 between the end of the year and the consideration of the
19 final scoping plan by the Board in the spring.

20 So -- and then the other thing that I would say
21 is that we do intend -- the process is designed so that
22 the Board would take final action on the scoping plan, and
23 the path forward post-2020 in the scoping plan, before the
24 Board takes final action on the cap-and-trade amendments.

25 BOARD MEMBER TAKVORIAN: But if I understand it

1 correctly, the OEHHA report is due out at the end of the
2 year, so the end of December, and the final action from
3 the Board on the scoping plan is due in March 2017?

4 DEPUTY EXECUTIVE OFFICER CHANG: Yes, in the
5 spring

6 BOARD MEMBER TAKVORIAN: Yeah. It just seems
7 like a short timeline for you all to do that analysis and
8 incorporate it into the scoping plan for you to get --

9 CHAIR NICHOLS: I don't think it's going to come
10 to them as a surprise when they get it. I think there
11 will have been interaction before. I mean, we don't wait
12 till something is published or, you know, submitted to us
13 in a formal fashion by U.S. mail. There's going to be a
14 fair amount of knowledge, if not total knowledge, of
15 what's actually coming before it actually arrives. I
16 mean, these are dates that are sort of intended to, you
17 know, formally tell you when the process is going to move
18 along. But I think information is coming in on a much
19 more ongoing and rapid basis as this evolves.

20 I guess the other thing though is I feel that a
21 lot of information that's going to come in, not only from
22 the community workshops, but, you know, from all the
23 workshops, is going to be relevant to things other than
24 the scoping plan. That's -- we act as though the scoping
25 plan was sort of the be-all and end-all. And it is the

1 place where we put together our plan for meeting our
2 climate targets, without a doubt.

3 But a lot of the concerns that I've heard raised,
4 certainly in my more limited interactions with the EJAC,
5 for example, relate to other aspects of our program, what
6 we're doing in our regular old day-to-day work on air
7 pollution, which is also critically important, if not more
8 important. And so we're going to need to act on those
9 things, not wait around for the scoping plan to be coming
10 forward, but, you know, acknowledging those comments where
11 they fit somewhere else and trying to pick up on them in
12 other places as well.

13 Yes, please.

14 BOARD MEMBER SHERRIFFS: A small question sharing
15 Dr. Balmes passion for health. Can you speak a little bit
16 more about the coordination with the California Department
17 of Public Health on the scoping plan?

18 INDUSTRIAL STRATEGIES DIVISION ASSISTANT CHIEF
19 SAHOTA: Good afternoon. Yes. So the California
20 Department of Public Health is very eager and very
21 knowledgeable in this area, and we've had several meetings
22 with them. We've been talking about studies and
23 information about what are the best ways to make sure that
24 we're dealing with equities to health and services that
25 are really important when you think about vulnerable

1 communities in California.

2 They've educated us that some of the key
3 indicators are really related to economics, as well as
4 access to services. So as we are working through the
5 development of the scenarios and the policies, we are
6 coordinating with them to see what additional supporting
7 information they can provide to indicate the benefits of
8 those policies and measures.

9 They have a group of about six folks there, a
10 whole unit that is solely looking at helping us on the
11 scoping plan on this go-around.

12 BOARD MEMBER SHERRIFFS: Thank you.

13 CHAIR NICHOLS: All right. Okay. Thank you.
14 This is just the beginning of a long process. And
15 speaking on behalf of the staff, I think it's fair to say
16 that they expect to hear from Board members, not only
17 formally at the meetings, but along the way as well.
18 Everyone of you has connects, has interests, has concerns
19 in people that you talk to in areas that you represent.
20 And so I hope you will -- I encourage you to talk to me,
21 as well as to the staff, about issues as they come up, so
22 we can make sure that they are being incorporated into the
23 work.

24 I have two more quick things to do before we can
25 go. The first is that we are losing a key member of our

1 staff to retirement. These things happen, but it's
2 important to take account of them when they do. This is
3 someone who's very modest and has been unwilling to accept
4 any kind of celebration of her service to us, but it would
5 be remiss of us to leave today without acknowledging that
6 our supervisor in charge of all of our regulatory
7 compliance activities, the technical work that goes into
8 running the administrative regulatory side of this
9 organization, all those deadlines and notices and
10 timelines and things that have to be met as well as the
11 clerk position for the Board has been under the direction
12 of Lori Andreoni, who was once the Board Clerk herself.

13 And so, Lori, I think -- at least I hope you will
14 let us recognize you and thank for your terrific service
15 to this organization, and wishing you the very best in
16 your retirement.

17 Thank you so much.

18 (Applause.)

19 BOARD MEMBER BALMES: I, for one, will miss your
20 smile.

21 CHAIR NICHOLS: Yes, indeed.

22 We have one person who signed up for the open
23 public comment period. Larry Hopkins, director of
24 training for the Operating Engineers Training Trust in
25 Southern California.

1 Is he here?

2 Mr. Hopkins?

3 Well, since he appears to have decided to leave,
4 we'll just keep his card. And I think that's it then.
5 Thank you all very much.

6 Good meeting.

7 (Thereupon the Air Resources Board
8 adjourned at 4:13 p.m.)

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C E R T I F I C A T E O F R E P O R T E R

I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing California Air Resources Board meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed, under my direction, by computer-assisted transcription;

I further certify that I am not of counsel or attorney for any of the parties to said meeting nor in any way interested in the outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 5th day of July, 2016.



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Certified Shorthand Reporter
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